NEW REMEDIES.

AN ILLUSTRATED MONTHLY TRADE JOURNAL OF
MATERIA MEDICA, PHARMACY, AND THERAPEUTICS.

VOL. VII., NO. 12. WHOLE NO. 54.

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EDITORIAL.

THE necessity for devoting a considerable space in this issue to the index of the volume obliges us to omit our notices of new books, abstracts of recent papers, many prescriptions and formulas; to considerably abbreviate the large-type matter, and to add four pages to the number. We have thought, however, that a comprehensive and carefully made index will prove of sufficient value to our readers to justify the space we have given to it.

The constant effort of the Editors has been to make NEW REMEDIES contain as complete a review of the progress in Materia Medica, Pharmacy, and Therapeutics as its pages could accommodate, without destroying the value of the matter by too much condensation, *and we invite the attention of those who are not already subscribers, into whose hands this number may come, to this index as an evidence of the degree of our success.*

THE occasion which leads us to give, as the first in our series of portraits, that of the late THOMAS H. POWERS, is one which awakens the deepest regret both of his community and his profession. The position which has been attained by the manufacturing house to which he belonged is certainly unrivaled in this country, nor are there many of like eminence abroad. But, besides this consideration, there have not been many persons of equal wealth or with affairs demanding a like amount of vigilance, who have so thoroughly identified themselves with the social and charitable enterprises with which they have been brought in contact; and the biographical sketch which we publish on another page will show that the death of Mr. Powers has removed from our midst one who had but few equals in the profession to which he belonged, or who made so good use of the talents with which they have been endowed.

ATTENTION is called to the annual report of the Western Druggists' Mutual Benefit Association referred to on page 372. The plan of the association differs in some respects from that which has been pursued in most other organizations for mutual benefit, the essential feature being that a strict physical examination is imposed, and that unhealthy persons are thus prevented from joining. It is true that this at once deprives the organization of the charitable character which belongs to associations in which no such restriction to admission exists; but, on the other hand, it is alleged that in practice it is found that few persons but those who are denied insurance in ordinary companies go into insurance associations which require no examination, and that the latter prove to be as short-lived as the members who hope to derive posthumous benefit from them. Furthermore, the adoption of the assessment plan; the reduction of expenses to the lowest amount practicable with the administration of the business, and the exclusion of all persons following extra-hazardous occupations, are thought to combine the available advantages possessed by the purely charitable organizations with the permanency and security of insurance based upon a strict inquiry into the physical condition of the applicant. This much is quite certain, that, within a certain limit, as regards membership, there is no plan which offers assurance at so moderate a rate as the one we here refer to, and the association appears to be well entitled to the confidence and support of the class to which its membership is restricted.

THE close of the seventh volume of NEW REMEDIES gives us occasion to thank the many friends who have aided in our work during the past year, not only by their subscriptions, but also by their contributions and letters of approval and friendly criticism. We wish especially to acknowledge the services of Dr. Geo. Thurber, of this city, in aiding us to establish the nature of botanical specimens which have from time to time been sent to us; of Mr. E. T. Ellis, of Philadelphia, for his correspondence relating to matters of interest transpiring in that city. We have also to thank Mr. Wm. Saunders, of London, Ontario; Professor Prescott, of Ann Arbor; Professor Diehl, of Louisville; Mr. Chas. Mohr, of Mobile; Professor Emlen Painter, of San Francisco; Dr. Fred'k Painter, of New Pittsburgh, Tenn.; Mr. Henry B. Parsons, of Washington; and Mr. Jesse W. Rankin, of Atlanta, for favors rendered. To Mr. James T. Shinn, of Philadelphia, we are indebted for the very complete report of the meeting of the American Pharmaceutical Association, which we publish with this number.

The editors of a journal, composed so largely as NEW REMEDIES has been of a review of current literature, must needs feel their obligation to the publications with which it has been exchanged, and we desire here to say that we have been careful to accredit the sources from whence our materials have been derived, not only that our readers may be able to consult the original papers, when desirable, but as a matter of right and editorial courtesy. Any failure to do so has arisen from oversight and not through intention. It has been our fortune to see some of our own editorial efforts appropriated without acknowledgment, and we are willing to believe that the same reason might be given for the omission. At all events, we feel that our subscribers are entitled to matter of more practical value to them than editorial complaints about editorial short-comings.

Our advertisers are entitled to commendation for the readiness with which they have appreciated the value, to them, of a strictly independent medium which strives to cater to both the daily wants and future needs of the pharmaceutical and medical professions. The fact that the applications for advertising space have led to the increase of this department from 36 pages, in December of 1877, to 76 pages, in the present number, is pretty good evidence that those who have once patronized this department of the journal find that the investment pays them.

MATERIA MEDICA, PHARMACY, AND THERAPEUTICS.

TRIAL OF SEVERAL METHODS FOR THE EXTRACTION OF GLYCERIN FROM MIXTURES CONTAINING GLUCOSE AND SUCROSE.

BY ALBERT B. PRESCOTT, M.D.

IT was found that glycerin and *sucrose* might be separated by dissolving out the glycerin with a mixture of two volumes absolute alcohol and one of washed ether (Hager: *Handbuch der Ph. Praxis*, ii., 28; Prescott's *Prox. Org. Anal.*, 86). Mr. O. H. Koehnle recovered 99.6 per cent of the glycerin in this way. The recovered glycerin gave no test for sucrose. A mixture of the glycerin and *glucose*, however, gave an amount of glycerin (and glucose) dissolved in the alcohol and ether, representing 116.6 per cent of the glycerin taken. The glycerin also gave a test for glucose. Almost identical results were obtained by using a mixture of equal weights of chloroform and alcohol (Hager: *Untersuchungen*, ii., 313; Prescott's *Prox. Org. Anal.*, 86), instead of the alcohol and ether, viz.: from the mixture of glycerin and *sucrose* 99.5 per cent glycerin was recovered, and gave no test for sucrose; from the *glucose* and glycerin mixture an amount was recovered corresponding to 119 per cent of the glycerin taken. A method suggested by E. Reichardt (Estimation of Glycerin in Wines, *Arch. d. Pharm.*, May, 1877, and Fresenius' *Zeitschrift*, 17, 109) was tried. The mixture containing the glycerin and the sugars was treated with slaked lime. Alcohol (90 per cent) was then added, which dissolved out the glycerin. The alcohol was evaporated, and the residue weighed as pure glycerin.

From a mixture of glycerin and *sucrose*, 99.8 per cent of the glycerin was recovered (the recovered glycerin giving no test for sucrose). From a mixture of glycerin and *glucose*, 99.7 per cent of the glycerin was recovered (the recovered glycerin giving no test for glucose). Mr. Koehnle then made a fluid extract of cinchona according to the U. S. P. (knowing exactly the amount of glycerin added); to a portion of this he added a known weight of sucrose, and to another portion a known weight of glucose. He extracted the glycerin as above, drove off the alcohol by heat, diluted with water, and extracted the coloring matter by adding ammoniacal acetate of lead (filtering, precipitating any remaining lead by hydric sulphide, and evaporating again to drive off the hydric sulphide). From the specimen containing *sucrose*, 95.4 per cent of the glycerin was recovered (no test for sucrose). From the specimen containing *glucose*, 98.6 per cent of the glycerin was recovered (no test for glu-

cose). He then prepared some fluid extract of gentian, adding known quantities of glycerin, *glucose*, and *sucrose*. Water was added, the resulting precipitate filtered out, and the solution, after evaporation, treated as in the preceding experiment; 97.6 per cent of the glycerin was recovered.

A sample of fluid extract of wild cherry, purchased of a druggist, was found to contain 4 per cent more of glycerin than the U. S. P. provides for.

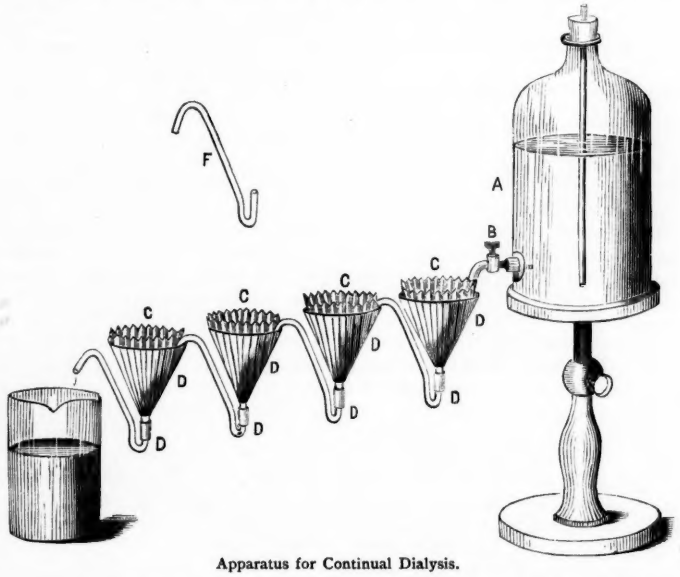
In Fresenius' *Zeitschrift* for 1878, Heft iv., p. 445, Messrs. C. Neubauer and E. Borgman found that in the estimation of glycerin in wines, the residue after the evaporation of the alcohol (in Reichardt's process) was not pure glycerin, as Reichardt states; that they did not even get pure glycerin by treating this residue with alcohol-ether; but they found that the residue from the alcohol-ether contained some unknown nitrogenous substances. They were able, however, by this method to recover very closely the glycerin added by them to certain wines. As to whether these statements could be made with reference to tinctures, fluid extracts, etc., remains to be determined. At all events, instead of weighing the residue, after evaporating the 90 per cent alcohol, as pure glycerin, as Reichardt suggests and Mr. Koehnle did in the above determinations, this residue should be treated with a mixture of absolute alcohol and ether (2 parts of alcohol, 1 part washed ether), and the residue from the alcohol-ether solution weighed as glycerin.

UNIVERSITY OF MICHIGAN,
SCHOOL OF PHARMACY, Nov. 4th, 1878.

Apparatus for Continual Dialysis.

THE apparatus hitherto in use for dialysis usually consisted of drum-shaped vessels floating upon distilled water, or of a series of perpendicular membranous septa contained in a trough, each alternate compartment of which is charged with distilled water. With a view of diminishing the amount of distilled water required and increasing the extent of dialyzing surface, Mr. Eug. Lebaigue has devised a new form of apparatus, which is here illustrated.

The apparatus consists of a large flask *A*, with faucet *B* at the bottom, full of distilled water; a series of glass funnels *D*, to the short neck of which is attached, by rubber-tubing, the curved syphon, which is separately figured in *F*; and finally a receiving vessel *E*. Each funnel is provided with a plaited filter made of parchment paper, and projecting $\frac{3}{4}$ to $\frac{7}{8}$ inch above the edge of the funnel. This is necessitated by the increase of volume of the contents of the filters. The first filter is now charged with solution of chloride of iron (ferric oxychloride) to about three-fourths of its depth. Distilled water is then poured into the funnel and allowed to remain in contact with the filter for twelve hours. Then the second filter is charged in the same manner and the faucet of the flask carefully opened, when the water of the first funnel will be gradually forced over into the second, and will be replaced by fresh distilled water. After 12 hours, another funnel with filter is connected with the series and this is continued with as many filters as is desired. The rate at which the distilled water is allowed to



Apparatus for Continual Dialysis.

pass is controlled by its dropping from the last syphon-tube.

Whenever the contents of the first funnel cease to have an acid reaction, and to be precipitated by silver nitrate, they are withdrawn, the second filter is made the first, and a new funnel with filter inserted at the end.

The proportions which Mr. Lebaigue has adopted for making dialyzed iron are the following:

Water of ammonia, sp. gr. 920.....	400 parts.
Distilled water.....	400 "
Solution of ferric chloride, sp. gr. 1,260.....	1,000 "

Mix the distilled water and ammonia, and add the mixture gradually to the solution of ferric chloride, under constant stirring, until a clear mixture results.

Experience having shown that among crystalloids, the chloride of sodium dialyzes best, Mr. Lebaigne thinks it would perhaps be an advantage to replace the ammonia by soda, or sodium carbonate.—*Journ. de Pharm. et de Chim.*

The Production of Oil of Rosemary in Dalmatia.

WHILE the rosemary appears in northern Europe only as an ornamental plant, and is easily destroyed by frost, it is found wild and in great abundance along the shores of the Mediterranean, of the Adriatic, and on some Dalmatian islands, particularly upon Lesina, the rocky calcareous soil of which is almost entirely covered with it. It thrives best on the southern side of this island, also upon Lissa and Maslinica; but, singularly enough, it is entirely absent upon the neighboring islands Brazza, Curzola, Meleda, and Lagosta, and the other Dalmatian islands. Elsewhere in Austria, it is only met with near Spalata and Ragusa, along the Croatian coast, near Trieste and Fiume, and upon a few islands of the Quaterno.* It is likewise largely grown along the western shores of Italy, upon Sicily and Corsica, in some portions of southern France, in Spain, Greece, Egypt, and Algiers.

Upon the island of Lesina the plant grows to a height of 12 to 24 inches; special nursing causes it to grow to about 45 inches, with a stem of ¾ to 1¼ inches in diameter. During the entire winter it is covered with dark-green leaves, and it flowers from February to April. The narrow oblong leaves are slightly revolute towards the lower surface, dark-green above, white below. Upon the under surface are situated the glands or cells containing the essential oil. The production of this, upon the island of Lesina, is constantly increasing. Although there exist no reliable statistics on the quantity of the oil produced, it is known that, already ten years ago, the value of the annual production amounted to about 30,000 florins (=$13,590), and that about double the amount is produced at the present day.

Every third year, during the month of May, the biennial shoots of the plant are cut off with knives, dried for about eight days in the sun, and deprived of their leaves. The latter are then moistened with water and transferred to copper stills, which are heated over a naked fire, near the sea-shore. The essential oil passing over with the steam is condensed in the usual manner, and received in flasks. As the apparatus is very crude, and the condensation imperfect, a good deal of the oil is lost, and fills the atmosphere over a large circuit with its odor. As soon as the oil is separated from the water, it is poured into tins, and shipped to Trieste. Oil of rosemary is chiefly used in perfumery; but the high import duties of olive oil in various European states have caused oil of rosemary to be also used for fraudulent purposes, namely, to flavor olive oil, so as to pass for oil of rosemary. The former, of course, thereby becomes unfit for use as salad or table oil, but is still well adapted to technical purposes.*

Trieste supplies the market annually with 34,000 to 40,000 pounds of oil of rosemary, which finds its way to northern Europe, to America, and even to France and Italy. The average price of the oil is 46 cents per pound.

For a long time there has been prepared in France and Spain an alcoholic perfume from oil of rosemary and other ingredients, which was known under the name "Aqua Reginæ Hungariæ." This appears to have originated upon the island of Lesina, for, since the times of the Hungarian Queen Elizabeth,† the so-called "Queen's Water" has been prepared there from oil of rosemary, and is still used as a popular remedy.

Besides essential oil, the islands of Lesina, Lissa, and Maslinica supply the market also with dried rosemary leaves, which are shipped to Trieste. They are employed as spice, as an aroma for smoked meat, or for preparing wine or vinegar of rosemary.—*Dingl. Polyt. Journ.*, 229, p. 466.

Wax and Substitutes.

BOTH yellow and white beeswax have reached a lower figure in Europe than has been known for many years. American beeswax is in but light demand there. *Carnauba wax* has been regularly received in Europe. The low stock of *Japan wax* in London, reckoned at 5,000 chests, a good deal of which has turned yellowish by age, makes a further advance from the present, already higher, price probable.—*Ceresin*, or *Ozocerite*. From Drohobycz, the centre of fossil wax production, it is reported that the weekly production now amounts to 5,000 cwt.

*V. Kleie, *Naturbeschreibung Croatiens.* Agram, 1878, page 374.

*M. Kispatic: *Der Rosmarinstrauch im südlichen Croatien.*

† Wife of King Charles I. Robert, 1307–1342.

POISONING BY THE LOCAL USE OF ARNICA.

BY R. S. HARNDEN.

NOTICING an article in NEW REMEDIES, Vol. V., page 16, on the Toxic Effects of Tincture of Arnica Used Externally, which quoted several authorities, and meeting recently with a similar result, I send it to you for publication. In the case I refer to, I had, some two months since, amputated a man's hand above the wrist. The stump healed nicely, and three weeks since he went to Wilkesbarre visiting. While there, finding himself suffering from some pain in the arm, he was in the habit of using tincture of arnica (it seemed to be very strong). Two days since, he noticed his arm began to swell and break out with little papules, then with vesicles, and finally to become excoriated. The whole arm became intensely red; the swelling, itching, and burning, accompanied with pain, being very great, and the discharge of serum constant from the excoriated surface. The end of the stump, where a dressing of lint with cerate had been, was not affected at all. There were no chills, no fever, no loss of appetite, nor prostration. Having in mind the cases referred to in NEW REMEDIES, I pronounced this case one of poisoning by tincture of arnica, much to the disgust of all the old women and the knowing ones. I have met with similar conditions before, but I never knew to what cause to attribute the local inflammation.

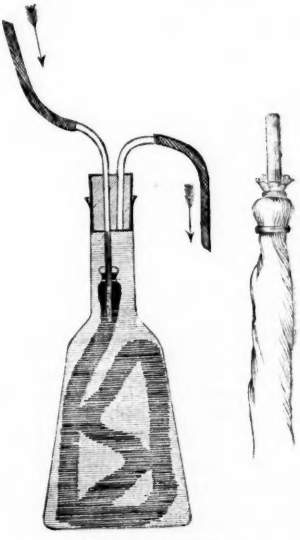
Ammonium Phosphate in Diabetes.

DR. JENTYS has reported a case of diabetes mellitus in which the patient voided urine containing ten per cent of glucose. An exclusive meat diet reduced this quantity to seven per cent; but in consequence of the patient's aversion towards this diet, it was changed to one of bran-bread and fruit, which resulted, in the course of about four weeks, in a reduction of the sugar to five per cent. Carlsbad and Vichy waters had but little effect upon the excretion. The patient suffered besides from bronchitis, and became, moreover, icteric. A renewal of meat diet with gymnastic exercise and faradization having proved unable to restore the failing strength of the patient, Dr. Jentys administered 3.75 gm. (= ab. 1 ʒ) of ammonium phosphate daily. The effect was unexpectedly favorable: the appetite returned, the anæmic symptoms disappeared, and the patient regained his strength so as to be able to attend to his business, although the sugar did not entirely disappear from the urine.—*Pharm. Zeit. f. Russld.* fr. *Med. Centr. Zeitung.*

Filtering Apparatus.

FOR the purpose of filtering turbid liquids, which it is desired to keep from contact of the air, particularly such as wines and fermentable fluids, the apparatus described in the following will be found of great service.

A flask or bottle, with rather wide neck, is fitted with a cork through which two glass tubes are passed, one of which projects a distance below the cork, and the free end of which passes through another smaller cork, while the other tube only just reaches to the lower surface (see cut). A linen bag, made by sewing a strip of linen $1\frac{1}{2}$–3 feet long and $2\frac{1}{4}$–$3\frac{1}{4}$ inches wide, is slipped with one end over the small cork at the end of the longer tube, and tied; the other end of the bag is either sewed up or closed by tying with a string. Previously, however, the bag is wetted with the liquid to be filtered, and partly filled



Filtering Apparatus.

with some of the turbid liquid mixed with coarse animal charcoal. It is then introduced into the flask, and the latter corked as shown in the cut. By connecting the vessel containing the turbid liquid with the bottle and filtering bag, by means of the flexible rubber tube, the liquid to be filtered flows by its own pressure into the bag, and is forced through its pores into the flask, whence it flows through the shorter tube into the receiver placed at a lower level. The cork used for closing the flask should be very sound; a rubber stopper is, perhaps, preferable. There are several advantages connected with this apparatus. In the first place, the flow of liquid may be retarded or accelerated by using longer bags and placing the flask at a lower level. The flow may be at any moment suspended or again started by the compression or release of a pinch-cock applied to the exit-tube. Finally, the filtering bags are easily cleaned, and there is scarcely any loss. Should any particular liquid be found not to pass clear through a single bag, a second bag may be slipped over the first, which will generally overcome this difficulty.—*Die Weinlaube*, No. 17.

THE AMERICAN PHARMACEUTICAL ASSOCIATION.

TWENTY-SIXTH ANNUAL MEETING.

THE twenty-sixth Annual Session of this Association met in Atlanta, Ga., November 26th, 1878, in Concordia Hall. Members from Canada, New Hampshire, Massachusetts, Connecticut, New York, Pennsylvania, South Carolina, Kentucky, Georgia, Alabama, and Missouri were present.

The meeting was called to order at 3.40 P.M., by the President, MR. WM. SAUNDERS, of London, Ontario, who introduced MAYOR ANGIER, of Atlanta. His Honor gave the Association a hearty welcome to the State and city, and was responded to by Mr. Saunders in a few words of thanks.

COMMITTEE ON CREDENTIALS.

The Chair appointed Messrs. Luhn, of S. C. ; Whiting, of Mass. ; and Russell, of N. H., a Committee on Credentials, and during their absence read the President's

ANNUAL ADDRESS.

He referred to the pleasant social features of the yearly gatherings, and then reviewed the state of pharmacy when America was discovered, giving some of the quaint old formulas of the period, closing by naming some of the additions which this continent has made to the materia medica.

Mr. Menninger moved that the usual course of referring the address to a committee be adopted, and the Chair appointed J. T. Shinn, of Pa. ; Mr. Whiting, of Mass. ; and Mr. Ingalls, of S. C., to report to a future meeting upon the suggestions made.

INVITATIONS, ETC.

An invitation to visit the State Geological Museum was received and accepted, and on motion of the Business Committee, invitations to attend the meetings of the Association were extended to the Governor, officers and members of the General Assembly of Georgia, Mayor and Aldermen of Atlanta, and the various medical societies of the State. An invitation to visit the works of the Atlanta City Brewing Co. was also accepted with thanks.

MR. WALTER A. TAYLOR was appointed to act as chairman of the *Committee on Papers and Queries* in the absence of Mr. Nichols.

DELEGATES.

After a short recess, the Committee on Credentials reported the following delegates from the various organizations entitled to representation in the Association :

COLLEGES OF PHARMACY.

Massachusetts : S. A. D. Sheppard, Charles A. Tufts, Aug. R. Bailey, G. F. H. Markoe, Thos. Dolliber.

New York : Charles Rice, Paul Balluff, P. W. Bedford, H. J. Menninger, F. Hoffmann.

Philadelphia : Alonzo Robbins, Jas. T. Shinn, Charles Bullock, J. L. Paterson, F. M. Murray.

National : John S. Jones, Oscar Oldberg, W. S. Thompson, T. G. De Moll, G. W. Cropley.

Cincinnati : J. D. Wells, E. S. Wayne, F. L. Eaton, Geo. Eger, R. M. Kunge.

Chicago : James W. Mill, N. G. Bartlett, F. M. Goodmann, E. H. Sargent. O. F. Hardroy.

Louisville : Emil Scheffer, C. L. Diehl, F. C. Miller, F. J. Pfinger, Vincent Davis.

Ontario : G. J. Waugh ; H. J. Rose, alternate.

PHARMACEUTICAL ASSOCIATIONS.

Connecticut : J. K. Williams, A. F. Wood, J. Olmstead, E. S. Sykes, H. S. Stevens.

Kings Co. : Dr. E. R. Squibb, H. J. Menninger, G. M. Baker, B. B. Livingston, J. L. A. Creuse.

New Hampshire : Chas. A. Tufts, E. S. Russell, C. S. Eastman, C. F. Hildreth, B. T. Backley.

Newark : Chas. B. Smith. C. H. Dalrymple, E. P. Nichols, R. W. Vandervoort, Chas. Holzhauer.

South Carolina : B. F. Moise, G. J. Luhn, E. S. Burnham, O. O. Michaelis, W. A. Gibson.

Georgia : Theo. Schumann, W. A. Taylor, T. L. Massenborg, H. P. Tarrant, E. W. H. Hunter.

Augusta : O. L. Smith, U. T. Reaney, D. G. Sheahan, S. C. Durtan, F. A. Beall.

German Apothecaries of New York : H. J. Menninger, C. Eimer, A. Tscheppe, F. Reichardt, P. Balluff.

Richmond : T. Roberts Baker, J. B. Purcell, P. E. Dupuy, J. W. Pierce, H. Bodeker.

ALUMNI ASSOCIATIONS OF THE FOLLOWING COLLEGES:

Massachusetts : S. A. D. Sheppard, G. F. H. Markoe, E. S. Kelly, John E. Groff, C. P. Orne.

Philadelphia : G. W. Kennedy, N. J. Bruner, C. Hancock, T. A. Cheatham, Hugh White.

St. Louis : H. E. Lindeman.

The report of the Committee was accepted, and the gentlemen admitted as delegates.

NEW MEMBERS.

The Chairman of the Executive Committee presented names of the following forty-nine pharmacists for election to membership, whom the tellers, Mr. Tarrant and Mr. Robbins, duly reported elected :

J. C. Schler, Pa. ; W. B. Addington, Va. ; Louis Emanuel, Pa. ; F. B. Mace, N. C. ; W. F. Ford, Mo. ; H. J. Finger, Cal. ; E. V. Zoeller, N. C. ; R. Voelcke, Texas ; S. Schley, Md. ; E. Giroux, Canada ; J. T. Foley, Texas ; E. N. Wells, Texas ; F. W. Walker, Pa. ; G. H. C. Klie, Mo. ; N. A. Kuhn, Ohio ; J. S. Smith, Ohio ; E. S. Danforth, Mass. ; E. M. Hatton, Ohio ; B. A. Perkins, Me. ; E. A. Gessner, Ct. ; J. G. Hermann, Md. ; George Jones, N. Y. ; C. M. Miller, Ohio ; E. Delery, Miss. ; J. H. Benjamin, N. Y. ; J. W. Stanford, Ga. ; R. Abell, Ky. ; J. L. McKenny, Ky. ; L. E. Welch, Ga. ; B. L. Hughes, Fla. ; J. C. Munds, N. C. ; W. L. A. Ellis, Ga. ; S. J. R. Younge, Ga. ; N. Wolfe, Pa. ; H. H. Stockpole, Mass. ; D. Hanson, N. H. ; E. Martin, Ind. ; E. Lilly, Ind. ; O. Butler, Ga. ; Arch. Avery, Ga. ; J. H. Morgan, Ga. ; J. L. Pinson, Ga. ; A. Candler, Ga. ; T. S. Hankison, Ga. ; L. W. Hunt, Ga. ; L. H. Bradfield, Ga. ; C. H. Green, Ga. ; R. T. Brumby, Ga. ; J. B. Dill, Ind.

Reports of all the Committees except that on Weights and Measures were presented and laid on the table to be read at a future session.

NOMINATING COMMITTEE.

The following Committee to nominate officers, etc., for the ensuing year was named by the various delegations : C. A. Tufts, N. H. ; H. J. Menninger, N. Y. ; James T. Shinn, Pa. ; E. Scheffer, Ky. ; G. W. Kennedy, Pa. ; J. F. Wood, Ct. ; C. S. Eastman, N. H. ; B. F. Moise, S. C. ; Theo. Schumann, Ga. ; O. L. Smith, Ga. ; H. C. Lenderman, Mo. ; J. W. Thomford, Mo. ; H. T. Rose, Ontario, and the following at large by the Chair : Messrs. Candidus, Maynard, Sloan, Lloyd, Griffith, and C. T. George, of Pa.

EXECUTIVE COMMITTEE.

The Chairman of the Executive Committee read his report, explaining the postponement of the meeting from September to November, giving obituary notices of departed members, etc. The Association now consists of 1,125 members, 12 deaths having occurred since the last meeting.

THE PERMANENT SECRETARY presented his report, which was accepted and referred to the Committee of three on the President's Address.

An invitation from the druggists of Atlanta to the members, exhibitors, and their ladies, to a dinner in Concordia Hall, on Wednesday evening, at 6 o'clock, was read and heartily accepted.

The following Committee on the Exhibition of Chemicals, etc., was appointed by the President : C. Mohr, H. J. Rose, E. Scheffer, J. W. Rankin, C. W. Hancock, after which the meeting adjourned at 6.30 P.M.

Second Day.

The Association was called to order Wednesday, Nov. 27th, at 10 o'clock, by President Saunders. The Secretary read the minutes of last meeting which were adopted.

Credentials were presented from the *Pennsylvania Pharmaceutical Association* for Messrs. Lemberger, Ross, Kennedy, George, and Patterson, and from the *Kentucky Pharmaceutical Association* for Mr. McKenna, who were admitted as delegates.

NOMINATIONS.

The report of the Nominating Committee was called for, and the chair appointed as tellers Mr. McKenna, of Ky., and Mr. Patterson, of Pa. On motion, the President was balloted for separately, and the Secretary deposited one ballot for the remaining officers and committees; the result is as follows:

President—Gustavus J. Luhn, of South Carolina.
1st Vice-President—Frederick T. Whiting, Mass.
2d Vice-President—Henry J. Rose, Ontario.
3d Vice-President—William H. Crawford, Mo.
Treasurer—Charles A. Tufts, N. H.
Permanent Secretary—John M. Maisch, Pa.
Local Secretary—(To be appointed.)
Reporter on Progress of Pharmacy—C. L. Diehl, Ky.

STANDING COMMITTEES.

Executive.—Geo. W. Kennedy, Pa. (Chairman); W. S. Thompson, D. C.; W. A. Taylor, Ga.; J. W. Mill, Ill.; J. M. Maisch, ex-off.

Drug Market.—W. H. Wickham, N. Y. (Chairman); T. R. Baker, Va.; I. L. Lyons, La.; J. G. Steele, Cal.; S. Carter, Mass.

Papers and Queries.—Emil Scheffer, Ky. (Chairman); Theo. Schumann, Ga.; John F. Judge, O.

Business.—H. J. Menninger, N. Y. (Chairman); C. L. Eberle, Pa., J. W. Loyd, O.

Prize Essays.—C. L. Diehl, Ky. (Chairman); J. F. Judge, O.; Emil Scheffer, Ky.

Legislation.—J. M. Maisch, Pa. (Chairman); J. W. Rankin, Ga.; P. C. Candidus, Ala.

Messrs. E. Scheffer and J. T. Shinn were appointed to conduct the President Elect to the chair, when he was introduced to the meeting by Mr. Saunders and made a short address. Vice-Presidents Whiting and Rose being present, were also presented.

An invitation was received and accepted to visit the paper-box factory of Rawson & Hancock.

REPORT OF THE TREASURER.

THE TREASURER, Charles A. Tufts, read his report, showing receipts, including balance on hand at last report, amounting to $5,313.49, and expenditures $4,451.18, leaving a balance in his hands of $862.31; the report was accepted and referred to an Auditing Committee consisting of Messrs. Lemberger, Moise, and Sloan.

REPORT ON DRUG MARKET.

Extracts from this report were read by Mr. Menninger, showing the prices of more prominent drugs for the past year in the New York market; and the state of the trade in Richmond, Va., as presented by Mr. Baker.

The report was accepted and referred to the Executive Committee for publication.

REPORT OF THE COMMITTEE ON PRIZE ESSAYS, ETC.,

was read, announcing the award of the EBERT PRIZE to Mr. Fred. E. Power for his essay on Podophyllum Peltatum and giving some of the reasons therefor.

The report was accepted and referred as usual.

The Report of PROF. C. LEWIS DIEHL on the Progress of Pharmacy was read by title and referred to the Executive Committee.

REPORT OF THE COMMITTEE ON LEGISLATION.

The Business Committee called up the report of Committee on Legislation, which was read by Secretary Maisch. A Pharmacy Act has been passed by Congress for the District of Columbia, and the merits and demerits of the law were pointed out. In Pennsylvania attempts to repeal the act relating to Philadelphia had been made, but were defeated. The Penal Code of California makes the adulteration of food, medicines, and liquors a misdemeanor. The report was adopted.

A REPORT ON THE CENTENNIAL FUND,

read by Mr. Kennedy, showed receipts amounting only to $163, and the time for making up the amount required, was extended.

No report was received from the Committee on Weights and Measures, and on motion it was discontinued.

The meeting then adjourned to examine specimens on exhibition and to converse, at 2.30 P.M.

AFTERNOON SESSION.

The third session was called to order shortly before 3 o'clock by Vice-President Whiting, and the minutes of last meeting were read and adopted.

EXHIBIT OF DRUGS AND CHEMICALS.

The Executive Committee made a Special Report upon abolishing the exhibitions in connection with the meetings. They suggested the introduction of rules into the by-laws restricting the articles to be admitted to crude drugs and chemicals, apparatus, and articles of general scientific or pharmaceutic interest; and excluding proprietary and patented medicines, those whose names were copyrighted or whose working formulas were not fully given, and preparations offered under other than scientifically recognized names. The report was adopted and the necessary notice given for the change involved in the by-laws.

THE REPORT OF THE COMMITTEE ON THE PHARMACOPŒIA,

MR. RICE, chairman, was presented and read, detailing the work of the committee so far as advanced. On account of ill-health, Mr. Rice presented his resignation from the chairmanship. The report was adopted and the resignation of Mr. Rice as chairman was, on motion, accepted with regret, testimony as to his efficiency being given by several members.

Resolutions of thanks were passed to Mr. Evarts, Secretary of State, and to all other gentlemen who have extended aid to the committee.

ANSWERS TO QUERIES.

QUERY 1. In view of the remedial properties accorded to coca leaf—Erythroxylon Coca—what pharmaceutical preparation can be made, having its properties in the most desirable form?

MR. GEO. W. KENNEDY, who had accepted this query, read a paper in reply, referring to past researches for alkaloids and recommending a formula for the fluid extract; using a menstruum of alcohol, fl. ℥ iv.; water, fl. ℥ xij.; reserving fl. ℥ xij. of percolate, continuing the percolation until the drug is exhausted, evaporating the latter liquid to fl. ℥ iv., and mixing with the reserve for a pint of extract from ℥ xvi. of leaf. He also proposed an elixir.

MR. JAMES G. STEELE, of California, presented a very comprehensive paper on Coca, part of which was read referring to the alkaloid Cocaina.

MR. ROSE, of Ontario, had used a saccharated solution of lime in connection with dilute alcohol as a menstruum, and the result had given much satisfaction to those using it.

MR. SAUNDERS had not found precipitation with dilute alcohol, but favored Mr. Rose's formula.

The papers were referred to the Executive Committee.

No. 2. What is the therapeutic value of dialyzed iron as an antidote for arsenious acid as compared with the hydrated ferric oxide?

No answer received, and it was continued to Mr. Tscheppe, of New York.

Nos. 3 and 4. No answer.

No. 5. Was continued to Mr. Kennedy.

No. 6. No answer.

No. 7. Damiana. An essay in regard to its medicinal value and active constituents, including its history and botanical source.

MR. MENNINGER, by whom this had been accepted, referred to the fact of there being two plants in the market sold as Damiana. In view of the acknowledged inertness of the drug, the query was discontinued.

No. 8. Are there any drugs now successfully cultivated here which were formerly obtained from foreign countries?

Continued to Mr. Wellcome.

No. 9. Compound resin cerate alters in consistence upon keeping. How can this be prevented?

MR. SHEPPARD suggested the use of paraffine oil in place of linseed oil in the preparation of this cerate.

No. 10. Confectioners frequently use deleterious substances for coloring candies. How can harmless colors, suitable for their use, be made?

A report from MR. S. P. SHARPLES was read, giving a long list of poisonous metallic colors used by confectioners and suggesting the lakes of various vegetable dyes to be used instead, but gave no formulas for their preparation. In this connection, Mr. Menninger stated that solution of silicate of soda entered largely into confectionery.

Nos. 11, 12, 13 were continued.

No. 14. No answer.

No. 15. It is written of the berries of Benzoin odoriferum (Spice Bush Berry), that they yield nearly fifty (50) per cent of fixed oil, besides about five (5) per cent of agreeable volatile oil. Is this really so? The plant being very common in some parts of the United States, for what can its products be utilized?

MR. A. W. MILLER'S paper, in answer to the above, described the extraction of the oil by expression and percolation with gasoline, amounting to 50 per cent of the berries used. About 12 per cent of this oil is soluble in 95 per cent alcohol, all of it in ether. About one per cent of volatile oil was obtained by distillation. A possible use for them might be in the flavoring of some of the popular beverages now in vogue.

No. 16. There is a counter-irritant or revulsive plaster spread upon linen or cotton cloth purporting to be made in Paris, France, under the name of "Emplastrum Thapsiæ." As this has decided therapeutic value, what is its composition, and can it be advantageously prepared and kept for extemporaneous use?

MR. H. P. TARRANT had been unable to obtain the thapsia and consequently was not prepared to report.

No. 17. What advantage, if any, would result from the removal of fixed oil from colchicum seed preparatory to the preparation of the fluid extract?

Mr. E. L. Boerner's paper on this subject was read by Mr. Scheffer, and referred to the Executive Committee.

No. 18. The answer was deferred.

No. 19. Can any improvement be suggested in the formula of the Pharmacopœia for fluid extract of wild cherry—keeping its object in view to represent chiefly the astringent and tonic virtues, combined with as much hydrocyanic acid and volatile oil as may be obtained by percolation?

MR. J. T. SHINN made a verbal report upon this query, accepted by himself and Israel J. Grahame, and presented a sample of fluid extract of wild cherry made by Mr. Grahame, in which the menstruum used was composed of 3 volumes of glycerin, 3 of syrup, and 10 of water, by which the bark was thoroughly exhausted. The resulting extract possessed all the sensible properties of the bark and mixed clearly with water and syrup.

MR. LUHN gave his method, in which a pound of bark was percolated with 4 parts glycerin and 12 parts water (volume), under pressure of a high column of water, with satisfactory results.

SECRETARY MAISCH presented the credentials of Robert S. Drake from the *St. Louis College of Pharmacy*, and he was admitted as a delegate.

THE LATE THOMAS H. POWERS.

On motion of Mr. Menninger, a committee was appointed to draft suitable resolutions upon the death of Mr. Thomas H. Powers. The chair named Messrs. Menninger, Ingalls, and Drake.

WALLACE BROTHERS, of Statesville, N. C., extended an invitation to the members to visit their establishment, which was accepted with thanks.

The meeting then adjourned to 9.30 A.M., on Thursday.

BANQUET.

About 7 P.M., the members and their ladies sat down to a magnificent collation tendered them by the druggists of Atlanta, and served in the dining room of Concordia Hall, in the course of which the following toasts were given and responded to in a happy manner. A fine band interspersed its music, and the evening was spent most enjoyably.

TOASTS.

By President Luhn—Our country. Responded to by William Saunders, of Canada.

By J. W. Rankin—Our guests. Responded to by Dr. Menninger, of New York.

By John M. Maisch—The State of Georgia. Responded to by A. Candler, of Georgia.

By Dr. Taliaferro—The American Pharmaceutical Association. Responded to by President Luhn.

By Dr. Menninger—Atlanta, the "Gate City" of the South—God speed her in rising phœnix-like from her ashes. Responded to by Dr. J. S. Pemberton, of Georgia.

By A. A. Menard—Our visiting and resident ladies. Replied to by J. T. Shinn, of Philadelphia.

By C. A. Tufts—The Committee of Arrangements. Response by Thos. Schumann, of Georgia.

By W. A. Taylor—The American Medical Association: May we, hand in hand, tread the paths of science, never usurping each other's functions, but each be dependent upon the other for success. Response by Dr. J. S. Todd, of Georgia.

Third Day.

At 9.45, Thursday morning, President Luhn called the Association to order, and Secretary Maisch read the minutes of last meeting, which were adopted.

INVITATIONS AND MISCELLANEOUS BUSINESS.

An invitation from the State Chemist, Mr. Wm. J. Land, to visit his laboratory, was read and accepted.

Invitations from Indiana, Maine, and Ohio, for the next meeting of the Association were presented and referred to a committee of three, afterwards appointed, namely: Messrs. Eastman of N. H.; Tarrant, Ga.; and Thomford, Mo.

MR. MURRAY of Pa., offered resolutions in regard to requesting the Signal Service Bureau to have the temperatures given in the daily reports, published in centigrade as well as Fahrenheit figures; also that the U. S. coins be stamped with their metrical weights, in order to familiarize the public with the metric system. They were referred to the Executive Committee.

By request of Mr. Menninger, Mr. J. L. Lemberger was put in his place on the committee in regard to death of Mr. T. H. Powers.

A special report of the Committee of Ways and Means was made, suggesting a sliding scale of payments for Life Membership, according to the time of connection with the association, as, first year, 75 dollars; 20 years, 40 dollars, etc. Also that a per capita tax be levied to supply deficiencies, and that the Secretary only send the proceedings after hearing from Life Members as to their address. Notice was given that a change in the by-laws involved in the resolutions of the committee would be considered at the next session.

On motion, the amendments proposed by the Executive Committee, covering rules for the admission of articles to the exhibition, as offered at last meeting, were adopted.

ANSWER TO QUERIES.

Answers to Queries being called for,

No. 18. Extractum Glycyrrhizæ fluidum. Should the alcoholic strength of the preparation be reduced, or what other changes are desirable in the formula to increase its adaptability for masking the taste of unpleasant medicines under varied circumstances?

Was replied to in a paper by Prof. Remington, read by Mr. Saunders. The reduction of alcohol and addition of ammonia was found to yield a menstruum that produced an extract of less acridity and more sweetness than the officinal. The formula recommended was to percolate ℥ xvi. of powdered root with a mixture of fl. ℥ iij. glycerin; alcohol, fl. ℥ iv.; water, O. ss.; sol. ammonia, fl. ℥ i.; then

pouring on dilute alcohol until 24 fluid ounces were obtained, reserving the first twelve that came through; evaporate the last to fl. ℥ iv., and add to reserved fl. ℥ xij., making O. i. For syr. glycyrrh. add Fl. ext., fl. ℥ ij., to syrup, fl. ℥ xiv. For aromatic elixir take Fl. ext., fl. ℥ ij.; alcohol, fl. ℥ iv.; syrup, fl. ℥ vi.; oil of cloves, 10 minims; oil of cinnamom, 5 minims; oil of nutmeg, 12 minims; water, q. s. ad O. i. Mr. Lloyd stated he obtained eighty pints of fluid extract by percolating one hundred pounds of powdered root with three parts water and one part alcohol until eighty pints had passed, using no evaporation.

Nos. 20 and 21. No answer received, and they were continued.

No. 22. No answer being received, was discontinued.

No. 23. Continued.

No. 24. No answer.

No. 25. Deferred.

No. 26. How can the salts of berberina be most easily prepared from the root of Hydrastis Canadensis? What will be the practical yield, and what are the solubilities of the different salts?

An admirable paper was read in reply by Mr. Lloyd, of Cincinnati. To obtain sulphate of berberina, 16 ounces of Hydrastis Canadensis are percolated with alcohol in a warm place until 5 fl. ounces are obtained; stop percolation 24 hours, and again obtain 5 fl. ounces, being careful to keep the powder always covered with alcohol. Mix the percolates, surround them by ice, and add sulphuric acid in excess with stirring; cool 12 hours, and pour on a strainer; return precipitate to 8 ounces alcohol, mix, and separate the impure sulphate of berberina; add one part of the salt to 16 of distilled water, drop in aq. ammon. in excess, and strain. In 12 or 24 hours add sulphuric acid without excess, and dry by exposure to current of air. The yield is from 18 to 21 ounces from 100 pounds of Hydrastis. Picrate of berberine is insoluble in water; phosphate soluble in 280 parts of water; hypophosphite, 5 to 10 grains to the ounce of water; muriate in 500 parts water at 60°, but not in alcohol, ether, or chloroform.

Hydrastis also contains hydrastia, obtained in nearly white crystals, insoluble in water, soluble in cold chloroform and boiling alcohol. The reader was loudly applauded on concluding his paper.

PLACE FOR HOLDING NEXT MEETING.

The committee appointed to propose the time and place for next meeting recommended that the Association should meet in Indianapolis on the second Tuesday in June, 1879. After some discussion, the place was adopted, but the time changed to the second Tuesday of September.

FURTHER ANSWERS TO QUERIES.

No. 27. Resin of podophyllum is found upon the market in color ranging from light-brown to deep-yellow. Can these various shades be obtained from Mayapple root without the use of foreign substances?

This was also answered by Mr. Lloyd. As a rule, the whiter the color of podophyllin the better. By using a solution of alum to precipitate the resin, a greenish-yellow color is produced. All shades can be made and yet be pure; the first percolate produces a darker podophyllin than a later one. It should always be dried in a cool atmosphere.

No. 28. How do Rio and East India tapioca compare in dietetic value? Not answered.

No. 29. Give a formula for a concentrated liquid preparation of lactucarium from which can be made the syrup, tincture, or other preparations.

This was answered by Joseph L. Lemberger, of Pennsylvania. The process recommended is to bruise 16 ounces of lactucarium and macerate it 24 hours in benzine O. ij.; decant the benzine and dry the lactucarium on a slab; rub this to a powder with sand, and percolate with dilute alcohol till 24 fluid ounces are obtained, reserving the first 4 ounces; evaporate the balance to 10 fluid ounces, mix this with the reserved 4 ounces, filter, and add enough dilute alcohol to make the whole weigh 16 ounces.

For tincture of lactucarium, add 2 ounces of this to enough dilute alcohol to make a pint. For syrup, 1 ounce is added to sufficient syrup to make a pint.

In this connection, Mr. Lemberger also showed aqueous extract of opium in which the opium had been treated with benzine similarly to the lactucarium.

No answers were received to Queries 30 to 47.

No. 48. An examination into the methods of distinguishing the alkaloids of cinchona bark from each other.

A paper by S. P. Sharples was read, but gave no practical method of distinguishing the alkaloids from each other.

The meeting then adjourned till 2.30 P.M.

FIFTH SESSION.

About 3 P.M., President Luhn called the meeting to order, and the minutes of the last meeting were read and adopted.

ENTERTAINMENT AND EXCURSION.

The Local Committee announced a musical entertainment in the evening for the benefit of members; also that excursion tickets to Jacksonville, Florida, could be obtained for $21.50 from Atlanta.

ANSWERS TO QUERIES.

The reading of papers was proceeded with.

To Queries 49, 50, and 51 no answers were received.

No. 52. What chemicals may be profitably made by the retail pharmacists, and what apparatus is required for their preparation?

A paper by Mr. Mercein, of Jersey City, was read in answer to the above, stating that the liquid preparations of iron, many of the salts of iron, citrate of iron and quinine, salts of mercury and lead, exsiccated alum, and sulphate of iron could be readily made by the pharmacist without expensive apparatus. The advantages of making these, apart from the profit, in an instructive point of view were spoken of by several members.

No replies were received to Queries 53, 54, 55.

No. 56. An essay suggestive and critical on the best plan of arranging and managing the store-rooms and cellar of a well-conducted dispensing store.

An answer to the above by Mr. Hancock was read by Mr. Lemberger and referred for publication.

VOLUNTEER PAPERS.

An essay on "Uniformity in Chemical Terminology," by F. M. MURRAY, of Pennsylvania, was read and referred to the Executive Committee.

MR. WM. SAUNDERS, Ontario, read a paper on "Sachet Powders," and gave formulas for heliotrope, clove pink, jockey club, frangipanni, millefleur, and wild flowers.

MR. LLOYD, of Ohio, read a volunteer paper in which he spoke of the "Value of Alcohol as a Solvent of Hydrocyanic Acid instead of Water." Some of officinal strength, made in 1874, and kept in a large bottle frequently opened, now contained 1¾ per cent of acid.

MR. LLOYD also gave the botanical names of some plants recently introduced and sold under other titles, as follows: *Rhamnus Purshiana* is sold for "Cascara Sagrado;" *Frankenia Grandiflora* for "Yerba Reuma;" *Berberis Aquifolium;" B. Repens, B. Nervosa*, and *B. Pinnata* are all sold for "Mountain Grape." *Bryzopyrum Spicatum* (Hooker) sent as "Yerba Reuma" by mistake.

The Auditing Committee reported that the Treasurer's account was correct in every detail, and on motion, he was authorized to destroy vouchers after being in his possession for three years.

A volunteer paper on "Fluid Extracts by Repercolation, written by DR. E. R. SQUIBB, of Brooklyn, was read by Mr. Saunders, and referred for publication, and on motion, a previous pamphlet on this subject by the same author was ordered to be published in the Proceedings in connection with this paper.

A paper by PROFESSOR DIEHL on "Fluid Extracts" was ordered to be published if not received in time to be read.

REPORTS OF COMMITTEES, ETC.

The Nominating Committee reported the name of ELI LILLY, of Indianapolis, for *Local Secretary*, and he was declared elected.

The report of the Committee to Consider the President's Address and the Report of the Secretary were read and adopted.

On motion of Mr. Saunders, it was resolved that when the Association again meets in the Southern States, it shall be in the spring months.

Volunteer papers written by Prof. A. B. Prescott were presented by the Committee on the Pharmacopœia, read by title, and referred for publication in the Proceedings.

NEW MEMBERS.

The Executive Committee having proposed the names of seven candidates for membership, Messrs. Sloan and Murray were appointed tellers, and they were duly elected.

LIFE-MEMBERSHIP.

The report of the Committee on Ways and Means was brought up for consideration, and the resolution that a per capita tax be assessed, in order to meet the expenses of the Association, was, after much discussion, laid over for consideration at the next meeting of the Association. The meeting then adjourned till the following morning.

EVENING ENTERTAINMENT.

In the evening a delightful entertainment was given to the visitors in Concordia Hall, where instrumental and vocal music was interspersed with refreshments, both solid and fluid, and contributed to the enjoyment of the guests until a late hour.

Fourth Day.

The meeting was called to order at 9.30 A.M., on Friday, by President Luhn, and minutes of the last session were read and adopted.

MISCELLANEOUS BUSINESS.

A paper on "Fluid Extracts," by C. L. Diehl, was read and referred to the Executive Committee, and one on "Percolation," by E. A. Joy, which was referred to the Committee on the Revision of the Pharmacopœia.

Part of the report of the Committee on Exhibition was read by Mr. Mohr, referring to the excellent display of California drugs by J. G. Steele, of San Francisco; of Georgia plants exhibited by Mr. Grant; and to the specimens of the alkaloids of Hydrastis by Mr. Lloyd, of Cincinnati. The report was adopted and referred for publication.

A RESOLUTION OF THANKS

was offered by the Business Committee to the druggists and citizens of Atlanta for the admirable arrangements for the comfort of the visitors and the courtesies shown them, which was carried by acclamation. Also one of thanks to the proprietors and reporters of the *Atlanta Daily Constitution*, for the kindly notices and full reports of the proceedings of the Association.

COMMITTEE ON THE PHARMACOPŒIA.

On motion, the following changes were made in the Committee on the Pharmacopœia: Mr. Sargent, in place of Mr. Ebert, of Chicago; Mr. Lloyd, in place of Mr. Wayne, of Cincinnati; and Mr. Dohme, in place of Mr. Hancock, of Baltimore. To fill the vacancy caused by the resignation of Mr. Rice, an election was held, and Mr. Louis Dohme, of Baltimore, appointed as chairman of the committee.

EXHIBITION OF SPECIMENS.

MR. INGALLS, of Macon, presented specimens of tea, and cork-wood and bark grown in Georgia.

MR. MAISCH showed two varieties of saffron, one grown in Pennsylvania, and the other adulterated with some powder which was probably gypsum.

RESOLUTIONS OF SYMPATHY, ETC.

The following resolutions relative to the death of Mr. Thomas H. Powers were offered by Mr. Lemberger, and unanimously adopted, and the Secretary directed to forward copies to the family of the deceased.

To the officers and members of the Am. Pharm. Association.

Your Committee appointed to note the death of the late *Thomas H. Powers* beg leave to offer the following tribute:

Whereas, This Association has been apprised of the decease of *Mr. Thomas H. Powers*, late of the city of Philadelphia, Pa., who, although not a member of this body, has become endeared to us and his memory deserves a suitable tribute at our hands, and whilst we bow with submission to the Divine Decree, we nevertheless feel a painful sadness in the thought that one, whose life was devoted to the study and development of the science of chemistry and pharmacy in our country, has been removed; whose character was unalloyed with blemish, whose fame as a man of strictest integrity and honorable purpose, whether viewed from a commercial or social standpoint, has spread far and wide, whose kindness of heart knew no bounds, so long as he was cognizant of its demands, and whose every act was prompted by a conscientious duty. We feel that in his death we are bereft of his useful influence and much valued encouragement in all that appertains to the highest interests of our Association.

Therefore Resolved, That this Association has an unfeigned though a melancholy satisfaction in testifying its marked appreciation of his service as a sincere humanitarian, a friend of education, and an unexceptionable example for us all, a shining mark among the illustrious and useful men of this age, whose exemplary life is worthy of highest admiration, and in whose footsteps we may with safety be inspired to follow.

Resolved, That, as an Association representing large commercial enterprises and interests, we find embodied in the life of the deceased those elements of virtue and purity of character to which we are proud to point as typical of all that constitutes the highest order of business integrity.

Resolved, That the sympathy of this Association is mingled with that of the numerous beneficiaries of the deceased, and by this tribute is hereby tendered to the sorrowing, afflicted family and firm of which he was a much revered member, trusting that the affliction thus visited upon them will be followed by the comforting recollection that a life so usefully spent is more honorable and enduring than any other monument or tribute that can possibly be raised to his memory.

Resolved, that a copy of this memorial expression be forwarded to the family and firm of the departed.

Signed,

JOS. L. LEMBERGER, of Pa. (Chairman).
JOHN INGALLS, Georgia.
ROBT. S. DRAKE, Mo.

Moved by Mr. Wm. Saunders and seconded by Prof. Maisch:

Resolved, That the heroism of our fellow-pharmacists in the plague-stricken districts in the valley of the Mississippi, who have nobly stood by their posts in the hour of danger, is worthy of all commendation; and this Association desires to place on record at this time its admiration of their noble daring in thus aiding suffering humanity at the risk of their own lives.

MR. P. L. TURNLEY, of Rome, Ga., was elected a member of the Association.

An appropriation of $35 was made for the expenses of the committee of last year on Revision of the Pharmacopœia, as well as for the one of the present year.

CENTENNIAL FUND.

MR. MENNINGER called attention to the Centennial Fund, and requested the officers to return their badges to the Permanent Secretary.

ADJOURNMENT.

After some expressions of thanks and good-will towards the citizens of Atlanta, the meeting adjourned, to meet in Indianapolis on the second Tuesday of September, 1879.

and thus closed another most successful and agreeable convention of the American Pharmaceutical Association.

MEMBERS IN ATTENDANCE.

Wm. Saunders, President, Canada; John Ingalls, second Vice-President, Ga.; John M. Maisch, Permanent Secretary, Pa.; Charles A. Tufts, Treasurer, N. H.; H. J. Menninger, N. Y.; George W. Kennedy, Pa.; R. H. Land, Ga.; Alonzo Robbins, Pa.; G. J. Luhn, S. C.; J. W. Rankin, Ga.; A. F. Wood, Ct.; E. S. Russell, N. H.; James T. Shinn, Pa.; N. P. Tarrant, Ga.; H. E. Griffith, N. Y.; Thos. P. Cook, Pa.; G. W. Sloan, Ind.; B. F. Morse, S. C.; E. Scheffer, Ky.; Theo. Schumann, Ga; J. F. McKenny, Ky.; S. F. Whiting, Mass.; P. C. Candidus, Ala.; H. J. Rose, Canada; C. S. Eastman, N. H.; A. A. Menard, Ga.; F. M. Murray, Pa.; J. J. Reynolds, Ga.; J. W. Lloyd, Ohio; C. F. George, Pa.; J. W. Richardson, Ill.; F. J. Peacock, Ga.; C. W. Hancock, Pa.; Walter A. Taylor, Ga.; J. L. Patterson, Pa.; B. L. Hughes, Fla.; A. J. Brunner, Ga.; T. L. Massenberg, Ga.; J. W. Tomforhde, Mo.; H. C. Linderman, Mo.; O. L. Smith, Ga.; J. H. Richardson, Chicago; Norman F. Kuhn, O.; John E. Grove, Pa.; Jos. L. Lemberger, Pa.; George J. Ross, Pa.; S. W. W. Shaffle, Pa.; Y. H. Morgan, Ga.; R. T. Brunsby, Ga.; R. S. Drake, Mo.; Peter J. Schumann, Ga. Total, 51 on register.

NEW MEMBERS ELECTED.

J. C. Schler, Pa.; W. B. Addington, Va.; Louis Emanuel, Pa.; F. B. Mace, N. C.; W. F. Ford, Mo.; H. J. Finger, Cal.; E. V. Zoelier, N. C.; R. Voelcke, Texas; S. Schley, Md.; E. Giroux, Canada; J. T. Foley, Texas; E. N. Wells, Texas; F. W. Walker, Pa.; G. H. C. Klie, Mo.; N. A. Kuhn, Ohio; J. S. Smith, Ohio; E. S. Danforth, Mass.; E. M. Hatton, Ohio; B. A. Perkins, Me.; E. A. Gessner, Ct.; J. G. Hermann, Md.; George Jones, N. Y.; C. M. Miller, Ohio; E. Delery, Miss.; J. H. Benjamin, N. Y.; J. W. Stanford, Ga.; R. Abell, Ky.; J. L. McKenny, Ky.; L. E. Welch, Ga.; B L. Hughes, Fla.; J. C. Munds, N. C.; W. L. A. Ellis, Ga.; S. J. R. Younge, Ga.; N. Wolfe, Pa.; H. H. Stockpole, Mass.; D. Hanson, N. H.; E. Martin, Ind.; E. Lilly, Ind.; O. Butler, Ga.; Arch. Avery. Ga.; J. H. Morgan, Ga.; J. L. Pinson, Ga.; A. Chandler, Ga.; T. S. Hankinson, Ga.; L. W. Hunt, Ga.; L. H. Bradfield, Ga.; C. H. Green, Ga.; R. T. Brumby, Ga.; J. B. Dill, Ind.; J. O. Burge, Ky.; Thos. F. Moore, Ala.; J. F. Hawkins, Ala.; Peter J. Schumann, Ga.; Chas. E. Sitton, Oregon; Jeff. Oxley, Ky.; D. W. Curry, Ga.; P. L. Turnley, Ga.

EXHIBITION OF DRUGS, CHEMICALS, ETC.

The exhibits were arranged in the rear of the hall in which the meeting was held.

The usual fine display of chemicals was made by Powers & Weightman, and Rosengarten & Sons, of Philadelphia; and of pills, galenical preparations, elixirs and copyrighted articles, by Wm. R. Warner & Co., McKesson & Robbins, Wyeth & Bro., Hance, Bros. & White, etc. Mr. P. C. Candidus exhibited native orange-flower water of fine fragrance, made in Mobile.

A valuable collection of named plants and drugs from California was sent from J. G. Steele of San Francisco, and the exhibit of the salts of Hydrastis Canadensis from Merrell, Thorp & Lloyd of Cincinnati was very fine and attracted much attention. The whole exhibition, though not large, was interesting and showed the enterprise of the exhibitors.

Cement for Sealing Bottles, etc.—Mix 3 parts of resin, 1 part of caustic soda, and 5 parts of water. This is then to be mixed with half its weight of plaster of Paris. The compound sets in three-quarters of an hour, adheres strongly, is not permeable like plaster alone, and is affected but slightly by warm water.

CHLORIMETRY.

BY HENRY B. PARSONS.

By the term chlorimetry is understood the volumetric estimation of the amount of free or loosely combined chlorine in compounds commonly used as bleaching agents; it has also been extended so as to include the valuation of certain peroxides—as black oxide of manganese (MnO_2)—which liberate an amount of chlorine from hydrochloric acid, corresponding exactly with the amount of pure peroxide present.

The solution used for estimation of chlorine can also be used for estimation of free iodine; hence, in the present article, will be considered: the valuation of the U. S. P. chlorinated compounds; of manganese dioxide (MnO_2); and of solutions containing free iodine.

I. CHLORINATED COMPOUNDS.

There are but three chlorinated compounds in the U. S. P., viz.: calx chlorinata, "bleaching powder" (chiefly $CaOCl_2$), the most important; liquor sodæ chlorinatæ, "Labarraque's Disinfecting Solution" ($Na_2OCl_2+Na_2CO_3$); and "aqua chlorinii," or water containing free chlorine gas. The value of these compounds as disinfectants, bleaching agents, or medicines, depends almost entirely upon the amount of chlorine which may be liberated from them by an acid, and the chlorine so liberated is technically known as "available chlorine." It will be understood that the term "available chlorine" refers only to *chlorine as such* (Cl), and does not include chlorides or free hydrochloric acid (HCl).

Available chlorine may be determined by a decinormal solution of sodic hyposulphite ($Na_2S_2O_3.5H_2O=248$), made by dissolving 24.8 grammes of dry, well-formed crystals of the salt in sufficient water to make a litre. One cubic centimetre of this solution is equivalent to .00355 gram of chlorine, or .0127 of iodine. These chlorinated compounds cannot be titrated directly with the hyposulphite, as the end reaction cannot be readily fixed; but if to the chlorinated compound is added potassic iodide with an acid, an amount of iodine will be liberated which is exactly equivalent to the available chlorine present (equations 1 and 2). That is, every .00355 gram of chlorine will set free just .0127 gram of iodine which will be decolorized by exactly 1 cc. of the decinormal solution of sodic hyposulphite (equation 3). Hence the number of cc. of hyposulphite, used to decolorize the liberated iodine, multiplied by .00355, equals the available chlorine present. The following equations explain these reactions.

1. $\left\{\begin{matrix}\textit{Calcic hypochlorite}+\textit{Hydrochloric acid}\\ CaOCl_2 \quad + \quad 2HCl\end{matrix}\right\} = -\left\{\begin{matrix}\textit{Calcic chloride}+\textit{Water}+\textit{Chlorine}\\ CaCl_2 \quad + H_2O + \quad Cl_2\end{matrix}\right\}$

2. $\left\{\begin{matrix}\textit{Potassic iodide}+\textit{Chlorine}\\ 2KI \quad + \quad Cl_2\end{matrix}\right\} = -\left\{\begin{matrix}\textit{Potassic chloride}+\textit{Iodine}\\ 2KCl \quad + \quad I_2\end{matrix}\right\}$

3. $\left\{\begin{matrix}\textit{Sodic hyposulphite}+\textit{Iodine}\\ 2Na_2S_2O_3.5H_2O + \quad I_2\end{matrix}\right\} = -\left\{\begin{matrix}\textit{Sodic tetrathionate}+\textit{Sodic iodide}+\textit{Water}\\ Na_2S_4O_6 \quad + \quad 2NaI \quad +10H_2O\end{matrix}\right\}$

The potassic iodide and hydrochloric acid should not show any free iodine when mixed (absence of chlorine in the acid, or iodate in the iodide), neither should the iodide have an alkaline reaction (absence of potassic carbonate). Having tested the purity of the reagents, weigh or measure a definite amount of the chlorinated compound, add excess of potassic iodide, and make slightly acid with hydrochloric acid. The number of cc. of hyposulphite required to decolorize the liquid, multiplied by .00355, equals the amount of available chlorine present. For the convenience of the student, the following calculations are given in full.

1. *Aqua Chlorinii—Solution of Chlorine* ($Cl+H_2O$). Specific gravity 1.003. One fl. oz. weighs 457 grains, and should contain 1.345 grains of gaseous chlorine, equal

to .29 of one per cent. 112 cc. should require *at least* 100 cc. of decinormal solution of sodic hyposulphite.

By standing in the light, solution of chlorine decomposes with formation of HCl and liberation of oxygen; if good, it *bleaches* litmus, but does not redden it.

2. *Liquor Sodæ Chlorinatæ. Solution of Chlorinated Soda.* Contains Na_2OCl_2 (sodic hypochlorite) and excess of Na_2CO_3 (sodic carbonate). Specific gravity 1.045. One fl. oz. weighs 476.2 grains, and contains 7.43 grains of available chlorine, equal to 1.56 per cent. 46 cc. should require 100 cc. decinormal solution of sodic hyposulphite.

3. *Calx Chlorinata. Chlorinated Lime.* "*Bleaching Powder.*" When of good quality, contains $CaOCl_2$. If poorly made, it may contain calcic chlorate ($Ca(ClO_3)_2$), and a large amount of chloride ($CaCl_2$), which causes it to become moist, by absorption of water from the air.

The U. S. P. requires that it shall contain 25 per cent of available chlorine, but it may be made to contain 35 per cent. .142 grains should require at least 100 cc. decinormal solution of sodic hyposulphite. It is very important that the strength of bleaching powder should be known, for if it contains less than 25 per cent of chlorine, the solution of chlorinated soda made from it will be too weak. In bleaching works an enormous quantity is used every day, and most consumers buy it only when it has been volumetrically estimated.

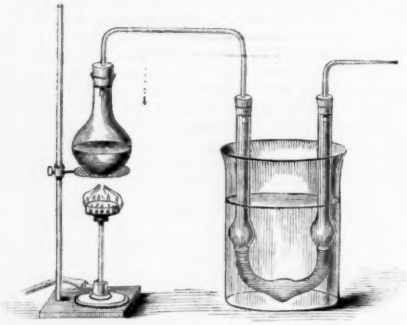
II. ESTIMATION OF BLACK OXIDE OF MANGANESE.

Manganesii oxidum nigrum U. S. P. (MnO_2).

If black oxide of manganese is dissolved in hydrochloric acid, two equivalents of chlorine will be liberated for each equivalent of the oxide; hence by estimating the liberated chlorine we may readily calculate the amount of oxide present.

$$\left\{\begin{array}{l} MnO_2 + 4HCl = MnCl_2 + 2H_2O + Cl_2 \\ 87 \text{ parts} + 146 \text{ parts} = 126 \text{ parts} + 36 \text{ parts} + 71 \text{ parts.} \end{array}\right\}$$

In other words, 87 parts by weight of black oxide, *if pure*, will liberate 71 parts by weight of chlorine; and conversely, for every 71 parts of chlorine found, 87 parts of pure black oxide were present in the sample. Every cc. of hyposulphite used in the estimation of the liberated chlorine will represent .00435 of pure manganese dioxide in the sample examined. The method is to weigh out a convenient quantity of the oxide, place in a small flask with excess of strong hydrochloric acid, heat gently, and conduct the evolved chlorine through an U tube containing potassic iodide; the number of cc. of hyposulphite required to decolorize the liberated iodine, multiplied by .00435 equals the weight, in grams, of pure MnO_2 in the sample. The apparatus in the figure is copied from Attfield's Chemistry, 7th edition, p. 562; it is very simple and convenient.



.435 grams of commercial black oxide of manganese should liberate sufficient iodine to decolorize 66 cc. of sodic hyposulphite. If this amount is weighed out, every cc. of hyposulphite used will represent one per cent of pure MnO_2. For impurities usually present consult the Dispensatory and other text-books.

III. ESTIMATION OF FREE IODINE IN SOLUTIONS.

There are three pharmacopœial liquids which contain free iodine, viz.:

1. *Tinctura Iodinii;* the strongest, which contains 1 oz. iodine to the pint, equal to 64.724 grams to the litre. Of this preparation 19.6 cc. should require just 100 cc. of sodic hyposulphite, of decinormal strength.

2. *Liquor Iodinii Compositus.* Contains 360 grains of free iodine to the pint, equal to 48.543 grams to the litre. 26.2 cc. are decolorized by 100 cc. of decinormal sodic hyposulphite.

3. *Tinctura Iodinii Composita.* Contains 240 grains free iodine to the pint, equal to 32.362 grams to the litre. 39.2 cc. are decolorized by 100 cc. decinormal sodic hyposulphite.

In addition to these liquids there is Iodinium in the Materia Medica List. If it is of good quality, resublimed, 1.270 grams will be decolorized by exactly 100 cc. decinormal solution of hyposulphite.

From what has been given, it will be seen that the *amounts* of chlorine, iodine, and manganese dioxide are found by multiplying the number of cc. of hyposulphite by .00355, .0127, and .00435 respectively. These amounts, divided by the weights of samples taken, and the quotient multiplied by 100, will give the *percentages* of chlorine, iodine, and manganese dioxide.

If it is desired to see the relative value of the preparation, as compared with U. S. P., standards, divide the amount found by the amount required by the U. S. P., and multiply the quotient by 100.

If the amounts of substances are taken which are prescribed in this article, their *relative* percentages are shown, without further calculation, by the number of cc. of hyposulphite used.

Thus, if the prescribed amount of chlorinated lime required 97 cc. of hyposulphite, instead of 100 cc., it was only $\frac{97}{100}$ as strong as required by the U. S. P.; or, it contained only $\frac{97}{100}$ of 25 per cent of available chlorine, equal to 24.25 per cent.

With very little practice the beginner may get accurate results in determining chlorine and iodine, and he will, in many cases, find that most of his bleaching powders and solutions of iodine fall considerably below U.S.P. standards. This is work that will well repay for time spent.

The Milk of the Cow-Tree.—MR. BOUSSINGAULT relates his personal experiences while visiting the regions where this remarkable tree occurs. Being established with Mr. de Rivero in the little town of Maracay, near the lake Tacarigua in Venezuela, to make astronomical observations, the natives brought them the milk of the cow-tree, which they consumed daily, mixed with their coffee or chocolate. At another occasion the author visited a forest abounding with the magnificent tree in question, which is the *Brosimum galactodendron*, of the natural family of Urticeæ. This forest is situated near the rapids of Naguanagua, not far from the thermal springs of Trincheras, and close to hacienda of Barbula, where already Humboldt had seen the natives collecting the milk by incisions made in the tree. The author has examined the milk and finds it to contain: 1st, a fatty substance resembling wax, fusible at 50° C., which represents the butter of natural milk; 2d, a nitrogenized substance very much analogous to cheese; 3d, saccharine substances; 4th, salts of potassium, sodium, and magnesium, together with phosphates. The following table exhibits the relationship of this liquid to genuine cream:

	Cow-tree milk.		Cow's cream.
Wax or fat	35.2	Butter	4.33
Saccharine matter	2.8	Sugar of milk	4.
Casein; albumen	1.7	Casein and phosphates	3.5
Mineral, etc., matters	2.3		
Water	58.	Water	58.2

—*L'Union Pharm.* from *Comptes Rend.*

PHILADELPHIA CORRESPONDENCE.

ALUMNI ASSOCIATION OF THE PHILADELPHIA COLLEGE OF PHARMACY.

AT the stated meeting of the Alumni Association of the Philadelphia College of Pharmacy, held on the 9th of Nov., upwards of 50 members were present, and papers were read as follows:

By MR. JOHN E. COOK, on Botany as a Field both for Instruction and Amusement, together with many useful hints in regard to the collection and preservation of specimens.

MR. R. V. MATTISON gave a very humorous account of his visit to a Chinese pharmacy in San Francisco. After describing how the crude drug is beaten in a brass mortar and pills made, probably as they were in the days of Hippocrates, he says of it, "What a paradise for druggists!" No sugar-coated pills! No elixirs! Only to think of it, ye who are compelled to keep a dozen different makers' article of the same thing! The prescriptions are written on rice paper and always returned with the compound or drug. (Would that not please our own physicians?) The scales are of the form of the old-fashioned steelyard. Ginseng is their great tonic and panacea. Opium is largely sold, almost always in the form of the aqueous extract. Of this there are two grades, and every smoker knows the difference. A good smoker can consume the weight of a trade dollar in a day.

As an illustration of their knowledge of chemistry and pharmacy it was stated that Dr. ———, their leading physician, who has also an extensive practice among the whites, "believes that strychnia is a mineral poison obtained from the ground!"

DR. F. M. MUNAY read a paper on the Art of Taking Notes at Lectures. As very few, if any, of our students have acquired a knowledge of phonography, he showed by illustration how symbols, figures, and abbreviations could be used to facilitate the work.

GEO. W. KENNEDY, of Pottsville, Pa., on Unguentum Aq. Rosæ. From the remarks it would seem as if there has been no improvement in this article during the past thirty years, as a number of communications have appeared in the journals on the subject. Some pharmaceutists recommend the use of borax; but whilst this will whiten the preparation and in some cases be of service, yet in many others it is inadmissible, as it is incompatible with a number of things for which the ointment is likely to be used as an excipient, as, for instance, calomel, which it will convert into an oxide, with change of color. Olive oil has been tried, but found to be prone to rancidity. The U. S. P. process has been found to be inconvenient, since when mineral or heavy substances are triturated with it, the Aq. rosæ is displaced, and the proportions reduced materially.

Mr. Kennedy offers the following, which he has found to be satisfactory:

Ol. amygd. dulcis	9 oz.
Cetacei	1½ "
Cera albæ	1 "
Ol. rosæ	gtt. 7

Specimens of Wild Peach from the Sierra Nevada, of Spt. Juniperis Comp. by I. B. Moore's formula were presented, and all the papers were referred to the publishing committee.

PHILADELPHIA COLLEGE OF PHARMACY.

The regular pharmaceutical meeting of the Philadelphia College of Pharmacy (the second of the season) was held on the 9th of November in the hall of the College.

Two hundred and thirty-six specimens of drugs presented by a college in Tokio, Japan, to the Philadelphia College were exhibited. These specimens were carefully sealed in glass tubes and formed a part of the Japanese exhibit at Philadelphia in 1876. A number of essential oils and flavoring extracts made by Jacques Pollak, of Vienna, and likewise presented to the school after having been a part of the Centennial Exhibition, were also shown.

PROF. SADTLER, of the University of Pennsylvania, showed some spirit of turpentine made from trees which grow in the Sierras. The odor was quite fragrant and very different from the Carolina article. We should not suppose it to be equal to the latter for domestic uses.

MR. BORING said that his attention had been called to cod-liver oil which it was claimed could by a patent process be made perfectly sweet, no matter how rancid it might have been previously. He was permitted to examine the apparatus, and found it to be an iron churn of about 12 gallons capacity, jacketed so that the steam could be applied to keep the contents at 100° Fahr. It was charged with 4 gallons of oil and 4 of water, the churn was then set in motion, and a current of cold air forced in the bottom, whilst a vent, some 3 inches in diameter, with a trap, allowed its escape. After the air ceases to be offensive, the oil is poured into open vessels and decanted. Samples of oil so prepared and of emulsion made from it were quite presentable, but the unanimous expression of the meeting was that fresh "Norwegian" oil is preferable.

PROF. MAISCH presented specimens of Theobroma Cacao pod and Cassia Braziliensis from Mr. Garcia, a former student, now in Cuba. The Cassia is similar to Cassia Fistula, excepting that the pulp is larger.

A horned toad received by mail was quite a curiosity to many present, also (photograph of) a so-called lily which, being abnormal in its growth, showed a partial transformation of spathe into leaf.

A specimen of phenol-phtaleïn, mentioned as a test for alkalies in an article in NEW REMEDIES of December, 1877, was shown and did not seem to us to be as sensitive as some other tests, but this was explained by the preparation being rather acid.

A paper by H. G. Debrunner, on Benzoinated Solution of Alumina, with specimens prepared by the process of the U. S. Dispensatory (p. 1049, 14th edition) and also carbolated in the proportion of ½ oz. to 1 pint of the solution. The latter is used in the same way as the other. The medical properties are styptic, as it acts by causing an immediate coagulation of blood. It does not appear to have been used to any extent in the U. S., but chiefly in France. It is certainly a very agreeable application.

The Late Thomas H. Powers.

MR. THOMAS H. POWERS, of the well-known firm of Powers & Weightman, of Philadelphia, manufacturers of chemicals, died of pneumonia at his residence in this city on Wednesday, the 20th of November, in the 67th year of his age. His illness was very brief, as he was at the office of the laboratory in the city on the Saturday morning (16th) previous to his death, and I am informed that up to 10:30 of the evening of Tuesday, strong hopes were entertained for his recovery. Even on the morning of Wednesday he was apparently as well as the day before; conversing freely with his family to within a few moments of the close of his life.

Mr. Powers early evinced a fondness for chemical pursuits, and was placed by his relatives in the store of Smith & Hodgson,* predecessors of the present house of Bullock & Crenshaw. About this time he graduated from the College of Pharmacy, and having served his term of apprenticeship, was admitted to the firm, although his name did not appear. In 1836, John Farr, an Englishman, who had, in connection with a Swiss gentleman named Kunzi, established chemical works in Philadelphia on a small scale some eighteen years previously, made his acquaintance through their connection with the Episcopal church.

This acquaintance resulted in the formation of a new firm in 1838, Mr. Kunzi having retired in 1836, Mr. Farr associating with him Mr. Powers and William Weightman, under the firm name of John Farr & Co., which three years subsequently was changed to Farr, Powers & Weightman, and in 1847 to Powers & Weightman.

The Philadelphia *Ledger* thus speaks of his business career, and expresses facts well known here at his home:

* Both of whom are now living.

"The history of this firm is the history of the growth of chemical manufactures in America. Commencing in a small way at Fourth and Coats Streets, Messrs. Farr & Kunzi devoted themselves principally to the manufacture of quinine. After the formation of the new firm, the manufacture of morphia was also commenced, and upon these two important staples its great business has been reared, until now its business outranks in magnitude any similar concern in America, and is not surpassed by any in the world; indeed, in the number of different chemicals prepared at its works at Ninth and Parrish streets and its other great establishment at the Falls of Schuylkill, it surpasses all others.

"In the composition of this firm Mr. Farr, himself an accomplished chemist, assigned Mr. Weightman, just then returned from his studies in Europe, to the chemical department, and Mr. Powers to the commercial, for which he was eminently constituted. While with Smith & Hodgson he had foreseen the important part which the newly introduced medicine, morphia, was to play in medicine, and had urged upon that firm the great advantage to them of commencing its manufacture, demonstrating by his own experiments that it could be produced at a profit. When he assumed his new relations, his desire was accomplished, and the manufacture of morphia became only second in extent and value to that of quinine.

"In the hands of this firm the manufacture of these articles was much simplified, and in the case of quinine, so much more economically conducted, that the price of that drug was very materially reduced. In late years the manufacture of quinine has been supplemented by the production of several alkaloids of like character, and one of these, cinchonidia especially, Mr. Powers was mainly instrumental in introducing to the medical profession, supplying them with the article gratuitously, and sending with the medicine a pamphlet containing necessary information.

"In April, 1865, the firm of Powers & Weightman established an office in New York City, the present location of which is 56 Maiden Lane. The magnitude of their operations is so well known that it is useless to detail them. At the Falls of Schuylkill the firm own seventy acres, ten or twelve of which are occupied by the laboratory buildings. The city laboratory is a monstrous structure, and has in its proximity three storehouses, which are also very large.

"In looking over the characteristic traits of Mr. Powers' character, the one which stands out boldly, and which, without doubt, made him so succesaful in every enterprise, whether in business or charitable pursuits, was his wonderful penetration and foresight. His fondness and aptitude for details was remarkable. When a new matter was presented, he instinctively grasped the subject in its entirety, specifying all the elements of success, and pointing out the principal obstacles to its accomplishment. And this was true, not only as to the details of the immense business which he conducted, but applies as well to the needs of the poorest of the objects of his almost boundless charity.

"Many facts might be cited illustrative of this ruling trait, the most recent being the sending to Atlantic City in detachments the five hundred young women employed in the works, at his individual expense, an account of which was recently published. His object, to give them a week of unalloyed enjoyment, was accomplished by anticipating almost every desire which comfort or fancy might create, and supplying the article itself. To say that such a man is mourned by the hundreds of employées of that great establishment, to each of whom he was like a father, would not express the sorrow felt by hundreds of families on the announcement yesterday of his unexpected death.

"Nor is that sorrow confined to those connected by business relations with him; the circle of his charities was so wide that it is hard to say where his loss will not be felt. Like the dew his charity fell on everything deserving it, and like the dew it fell silently; the giver and the recipient were in very many instances the sole keepers of the secret, while many received, not knowing to whom they were indebted. A peculiarity of his giving was that the recipient was not made to feel the obligation; nay, to feel that he was deserving of it. And, where it lay in his power, he would put the recipient of his bounty in a way to help himself. How much of his fortune was expended in this way no one, probably not even himself, ever knew."

An instance of his sense of delicacy (in bestowing gifts) came under my own knowledge. Some years since, one of a number of schools which were chartered in the early settlement of Pennsylvania under title of Charity Schools, and are still maintained to some extent by individual aid, asked for assistance. In his response he said, "Tear down the name of 'charity' school from your walls, erase it from the school books, do not keep it before the eyes of those children, making them believe they are objects of charity, when they are no more so than the millionaire's son who is sent to the princely endowed colleges of our land, and I will give ——— (a handsome sum) and remember it in future."

He was a man of strong religious convictions and "his business and his religion went hand in hand; they were not antagonistic at any point, and perhaps one great element of his business success was his determination from the start to make one subserve the other. This may perhaps be illustrated by reference to the action of his house during the late yellow-fever epidemic, which caused a sudden and great demand for quinine. The importers of that necessary drug at once advanced the price a dollar and a dollar and a half an ounce. Mr. Powers on the other hand, and on all similar occasions, declined to sell quinine to speculative purchasers, but furnished to his old customers at the old rates, and it may be said generally that no hope of gain ever tempted him to take advantage of a public necessity. His business manager stated that, in a conversation very recently, Mr. Powers said, 'I believe it my duty to provide work for the poor in this time of general distress, and therefore I build, although I might find more lucrative investments for my money.' Thousands of workmen were thus benefited by this noble-hearted man."

"It is well known in this city that the Reformed Episcopal Church is largely indebted for its advancement to the wealth which he so freely bestowed to secure its prosperity. Always a low-churchman, he espoused the cause of Bishop Cummins at once when he came out from the Protestant Episcopal Church. He attended the first convention of the new church in New York, and took a leading part in the debates which led to the establishment of that denomination. He was one of the movers, if not the first mover, in organizing that denomination in this city, and for some time the vestry meetings were held at his house. He expended large sums yearly in publishing religious works for free distribution, and many a young clergymen in both churches has been supplied by him with a fine reference library.

"Always a free giver in the old church, his contributions to the new were many and large. The beautiful edifice of the Second Reformed Episcopal Church, at Twenty first and Chestnut, over which Bishop Nicholson presides, and of which Mr. Powers was a member, was built by him as a free gift to that church. He also built the chapel at Sixteenth and Oxford, and in great part the chapels at Frankford Road and Sepviva street, and those in Frankford and Germantown, and the one at Falls of Schuylkill. He also contributed largely to build a great majority of the eighty or ninety churches of the new denomination scattered through the country, South, West, and even in Canada. The *Episcopal Recorder*, the organ of the church, is an individual enterprise, productive of much good, but from which no revenue is derived; it, like his other publications, being but one of the many means in his hand for advancing the church's interests. While the loss of such a supporter must be immediately and seriously felt, he has done so much to establish it that no fears are felt for its future success.

"Not only in church edifices has Mr. Powers enriched our city, but he has beautified it with many beautiful dwell-

ings, notably those in the immediate vicinity of the Second Reformed Church, at Twenty-first and Chestnut, on both sides of Chestnut and on Twenty-first Street, at Forty-first and Forty-fourth and Forty-fifth and Chestnut, and in many other parts of the city.

"Though connected with and contributing to many public charities, he was more immediately concerned in the Howard Hospital, and with the charitable trusts controlled by the Girard Trust, of which he was a director. He was also one of the Board of Prison Inspectors, and was instrumental during his long service on that Board in bringing about many needed reforms in prison discipline. He was a director of the Commercial National Bank, and was punctual in his attendance to the duties of all these positions. In fact it may be said that one secret of his ability to accomplish so much work so varied in character was that he had an appointed time for everything. He had gathered around him capable men whom he could trust to carry out his wishes—men trained up in an atmosphere of devotion to business and principle, and who were devoted to him."

The deceased was a man of rather remarkable personal appearance, and bore a striking likeness to the late Horace Greely. Of late years he was very venerable in appearance, and was one who would be noted anywhere as a man of remarkable ability. His capacity as a business man was gigantic, and notwithstanding the various religious and charitable objects to which he gave his time and means, he still continued to push his own business with remarkable energy.

He leaves a very large estate, the principal being estimated at several millions of dollars. A wife and one daughter survive him. Always prepared for the event in business, so death found him ready. His life had been all peace, and death was without a struggle."

NOTES, QUERIES AND ANSWERS.

[*Under this heading we shall, to the best of our ability, endeavor to answer such questions addressed to us as come within the scope of this journal, provided they are accompanied by the name and address of the writer. Answers to queries received after the 5th of the month will lie over until the next issue.*]

No. 466.—**Ayer's Ague Cure** (Physic, Richmond, Ky.). We are not aware that an analysis has been made.

No. 467.—**Gypsum and its Use in Brewing** (A. W. S., Pomeroy?).

As an answer to your query in regard to the use of gypsum for this purpose, we quote a portion of a recent article in the *British Mail*, in which it is stated as a well-known fact that—"by brewing with water containing gypsum, a greater extract is obtained than by using ordinary water, as the gypsum facilitates the solution of the saccharine principles of malt, while at the same time it prevents the solution of the albuminous matter, an excess of which is so detrimental to the keeping quality of beer. Beers brewed with water containing gypsum are also paler than those brewed with common water, and become bright without the use of finings. Gypsum is also largely used in the manufacture of sherry wines. The stone itself, however, is so hard that when used in its natural state in wells, it takes some time to dissolve. An English firm is manufacturing a gypsum preparation, composed entirely of the purest sulphate of lime, and which is not objected to by the Excise. One pound of it is advertised as sufficient for sixty gallons of water, and the firm claims that it renders the latter equal in hardness to the best brewing waters at Burton-on-Trent."

W. G. I. Wheeler, of 25 New Chambers Street, in this city, is the agent in this country for Mr. Jos. Holmes, of Leeds, who manufactures gypsum for this purpose; and from this source further information can doubtless be obtained.

No. 469.—**Tincture and Elixir of Grindelia Robusta** (D. B. N. F., Mass.).

As it is rather difficult to convert Grindelia into powder, on account of the sticky resin adhering to it, it is best to precede the process of percolation by a prolonged maceration.

Tincture of Grindelia.—Take 4 troy ounces of Grindelia, cut into small fragments, pack it firmly into a conical percolator, the orifice of which is closed with a cork, place a strong cover over the substance, and on top of this appropriate weights. Now pour upon it 32 fl. oz. of a mixture consisting of 2 volumes of alcohol (sp. gr. 817) and 1 volume of water, and allow it to macerate for five days, keeping the percolator well covered. Then remove the cork from the orifice, and regulate the flow of the percolate so that it passes at the rate of about 2 drops per second. When the liquid ceases to drop, pour upon the Grindelia enough of the same menstruum to obtain 32 fl. oz. of percolate.

Elixir of Grindelia.—Take 16 fl. oz. of tincture of Grindelia, expose it in a capsule until it has been reduced by evaporation to the bulk of 10 fl. oz. Then add to it 12 minims of oil of orange and 1 minim of oil of cinnamon, previously dissolved in 1 fl. drachm of alcohol, and finally add a mixture of 3 fl. oz. of alcohol and 3 fl. oz. of syrup. This elixir has the same strength as the tincture.

No. 472.—**Balata** (A. B., Philadelphia, Pa.).

In addition to what has already been said on page 287 of our present volume, the following may partially serve your purpose:

The substance termed "balata" was introduced into commerce about 15 years ago, as a substitute for caoutchouc and gutta-percha. It is the dried juice of the bully-tree (*Sapota Muelleri*, nat. fam. Sapotaceæ), distributed over the whole of Guiana, and appears in dirty-white, sometimes quite large pieces, which are hard and brittle while cold, but soften in hot water to a pliable, soft mass like gutta-percha. According to the investigations of Sperlich (*Dingler's Polyt. Journ.*, vol. 193, p. 81), acidulated water extracts from the crude balata a small quantity of a yellowish-brown coloring matter, and absolute alcohol extracts a colorless resin, while the residue dissolves in carbon disulphide to a colorless liquid all but some fragments of the bark which are left behind. This last solution, on evaporation, leaves a white transparent mass, having the composition of a hydrocarbon, and being very near to that of gutta-percha. According to Prof. Gintl, ether dissolves the crude substance to an almost colorless solution, leaving behind only foreign bodies and a small quantity of a tough, elastic substance. Absolute alcohol precipitates from this a white flocculent mass, resembling wax, and readily fusible.

Balata is mostly exported to England from Berbice in British Guiana. It is sometimes called Leche de Popa. Although balata was first considered a welcome and satisfactory substitute for gutta-percha, it does not appear to have found much application, and is said to be only occasionally used, mixed with gutta-percha.

The solution of balata, as well as the fresh milky juice, are said to be well adapted for the manufacture of water-tight fabrics. Compare O. Buchner in *Dingler's Polytech. Journal*, vol. 172, p. 146. Also see references in the indices to *Dingler's Journal* for the last 15 years; and *Wagner's Jahresberichte über Technologie*.

We have made inquiry in regard to the presence of this substance in the New York market, and learn that a few hundred pounds only were imported some time since, and this was at once disposed of to a dealer who resold it to various customers. At present, there is none to be had here, so far as we can learn, nor is any expected.

No. 473.—**Sicopirin** (Dr. A., Breslau, Germ.).

This alkaloid, an account of which was given in our vol. for 1876, p. 263, is not quoted upon any price-lists

which have come to our notice. If you will inquire of Prof. G. A. Geuther, in Jena, or of Messrs. Jobst and Hesse (Stuttgart), or of H. Trommsdorff (Erfurt), you will probably get the desired information.

No. 475.—**Elixir of the Phosphates of Iron, Quinia, Strychnia, and Lactopeptine** (D. P., Philadelphia, Pa.).

Our correspondent asks us for a formula for this. We fail, however, to see what good it can do, either for us to give it, or for him to receive it, as it manifestly belongs to the modern class of "grape and canister" remedies, which, while they attempt to do too much at once, fail to accomplish anything at all. There is no difficulty, so far as we are aware, in dissolving lactopeptine in the elixir of iron, quinia, and strychnia phosphates; but how much is to be added may depend on the whim of the person ordering or using it. We strongly advise our correspondent to discourage the use of such complicated formulæ.

No. 476.—**Phosphate of Strychnia** (P., Philadelphia, Pa.).

Prepare some freshly precipitated strychnia; mix it with ten parts of water, heat to boiling; then add gradually enough concentrated pure tribasic phosphoric acid to dissolve the strychnia. There should only be a very faint excess of acid used. Set aside in a very cold place to crystallize. The motherwater, on concentration, will furnish more crystals.

No. 477.—**McArthur's Syrup** (O. F., New York City).

This is a syrup of hypophosphites of lime, etc., being introduced to the trade through the efforts of Dr. J. A. McArthur, of Lynn, Mass. Messrs. Weeks & Potter, of Boston, are the wholesale agents. The syrup is very clear and handsome in appearance; is said to be free from medicinal taste, and sells for $9.00 per doz., or $1.00 per bottle. It is recommended by Dr. McArthur as a preventive of consumption.

No. 478.—**Tinctura Saponis Viridis** (W. J. M., Jersey City, N. J.).

This preparation, which is used in some of the public dispensaries of New York City, as an application in certain skin-diseases, is made after the following formula:

Green soap	2 ℥
Alcohol	4 fl. ℥ Mix.

Tinctura Saponis Viridis Co. (Same).

Used for similar purposes, contains:

Green soap	1 ℥
Alcohol,	
Oil of cade	āā 1 fl. ℥

No. 479.—**Hawk-Weed** (D., Cambridgeport, Mass.).

This is a species of *Hieracium*, nat. fam. Compositæ. That which most generally bears this name, and the only one which appears to be used in domestic practice, is *Hieracium venosum* L., also called *Rattlesnake-weed, Striped Blood-wort, Veinyleaved Hawk-weed.* Both the root and the leaves are used. The juice of the fresh leaves is said to be efficacious for removing warts. The powdered leaves and root have been used as a snuff, combined with powdered bloodroot, in polypus of the nose. See *King's Amer. Dispensatory;* also *U. S. Dispens.*, p. 1663.

No. 480.—**Lactopeptine** (G., Wilmington, Ill.).

The manufacturers of this compound give the following formula: Pepsin, 8 ounces; Pancreatine, 6 ounces; Vegetable ptyalin or diastase, 4 drachms; Lactic acid, 5 fl. drachms; Hydrochloric acid, 5 fl. drachms; Sugar of milk, 40 ounces.

No. 481.—**Nigrosine Ink** (Dr. H. J. W.).

After we had seen the account of nigrosine-ink, an abstract of which we gave in our last number, page 337, we wrote to Mr. E. Stoermer of Breslau, in reference to the *Noir perfectionné*, which was said to yield the best kind of black ink, and which could be fixed so as to become insoluble. We have just received the answer that Mr. Stoermer has secured the sole agency for the sale of this variety of nigrosine in Europe, that its price, on the spot, was 30 marks per kilogramme, and that the method of fixation is furnished to those who purchase it.

No. 483.—**Meyer's "Improved" Detergent.** (A. K. & G. A. Br., Jr., Poughkeepsie, N. Y.).

We are informed that this article is a species of soda-ash. It is entirely soluble in water, and contains nothing but what is ordinarily present in good soda-ash. More by letter.

No. 482.—**Syrup of Chloral** (E. P. H., Ann Arbor, Mich.).

Our correspondent draws attention to the fact that the new (14th) edition of the United States Dispensatory, on page 1,476, after giving the formula of the British Pharmacopœia for "Syrupus Chloral," states that "one fluid drachm of this syrup contains 20 grains of chloral and is a full dose."

This is, of course, wrong; it should be 10 grains.

At the same time, we would like to recall to the memory of another of our correspondents, whose query refers to another subject, the fact that British fluid ounces and minims differ from ours. Our grain, however, is identical with the British grain.

1 United States minim (apothecaries' measure)	=	1.04 British minims (imperial measure).
1 British minim (imperial measure)	=	0.96 United States minims (apothecaries' measure).

Hence, to take "Syrupus Chloral" as an example, the formula of the British Pharmacopœia, which directs:

Chloral	80 grains.
Distilled water	4 fl. ℥
Simple syrup	q. s. ad 1 fl. ℥

when closely translated into our measures, would become:

Chloral	80 grains.
Distilled water	249.6 minims.
Simple syrup	q. s. ad 499.2 "

A United States fluid drachm, or 60 minims of this, would contain 9.6 grains of chloral.

Of course, in making the British syrup of chloral here in the United States, it is best to use our United States measures, so that 480 minims (or 1 fl. ℥) contain 80 grains of chloral.

No. 484.—**Hair-Dyes** (W. B. J., Salina, N. Y.).

A dark-brown color may be imparted to hair by various methods. The following are among the best, and are altogether harmless:

1. One part of pyrogallic acid is dissolved in a mixture of two parts of eau de cologne and 38 parts of distilled water. The hair having been freed from fatty matters by luke-warm soap-suds, it is well moistened with the above solution every other day, and, when dry, faintly anointed with hair-oil.

2. 10 parts of fresh walnut-leaves (*Juglans regia*), gathered in July, are digested for two days, under frequent stirring, with 20 parts of alcohol and 20 of water. The liquid is removed and expressed, filtered, and concentrated to a syrup over at a gentle heat. 10 parts of the resulting brownish-black syrup are diluted with 15 parts of alcohol and 5 parts of water, and perfumed according to fancy. The hair having been freed from fat in the usual manner, it is moistened with the dye, brushed well with a soft brush, and afterwards oiled.

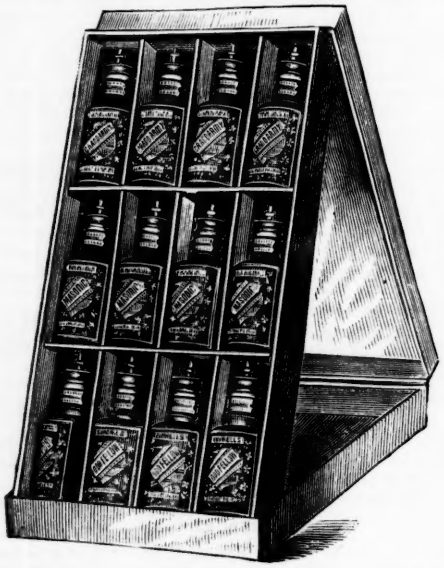
No. 468.—*Colored Dry-sized Kalsomine;* No. 470.—*Soluble Bougies.*—Look for answers in next number.

An Elastic Pencil of Lunar Caustic is prepared by Dr. Pajot by dipping a laminaria tent two millimeters in diameter into tolerably thick mucilage and then rolling it in finely powdered nitrate of silver. After drying, an elastic pencil the size of the ordinary stick remains which may be readily introduced into the uterine or other cavity without fear of fracture.

NOVELTIES.

New Regalia Bouquets.

THE adjoining illustration represents a new display-case and its contents just put into the market by George Burwell, of 72 Church St., Boston. Altogether this new line of extracts is the most elegant that we have yet seen, and possesses several noteworthy features. First, the case is composed of three portions, the tray being so made as to be inclosed by the others, when not arranged as here shown. It then resembles an ordinary box with a hinged cover. In the present form, the cover serves as the base, and four brass nails at its corners prevent scratching of the "chromo" with which it is decorated. The bottom portion of the case and the ledge of the cover furnish supports to hold the tray in an inclined position. The bottles are furnished with metal sprinkler tops, which avoid any



necessity for removing the corks, a couple of turns of the tip unscrews the valve and allows the extract to be shaken out. The labels are in red, blue, and gold, on a ground of white, yellow, or blue, and are very showy. The names "Grand Army," "Masonic," and "Odd-Fellow," are novel and quite as appropriate as such names usually are. The odors are agreeable. The price: $21.00 per gross, or $1.75 per doz., is the most remarkable feature. How a line of goods with so many attractive features can be sold at this rate is quite marvellous, and Mr. Burwell undoubtedly depends upon a large demand for his goods as a basis for his profits. While these extracts can be sold for twenty-five cents a bottle, they will readily bring more.

Medicated Catarrhal Cigarettes.

PETINGALE & DE MOTT, proprietors of "Carlton's Specialties," are manufacturing cigarettes with paper mouth-pieces, and containing a variety of vegetable substances for the relief of Catarrh, Asthma, Hay-fever, and some other affections of the respiratory passages. They have been too short a time in use to warrant an opinion regarding their therapeutical value, but the fact that the ingredients, which have been named to us, have long been employed independently in the catarrhal and spasmodic affections above referred to, would warrant a trial in this form. Ten cigarettes are contained in each package, and the latter is gotten up in the excellent style characteristic of all the goods of this house.

Apparatus for Giving Medicine to Horses.

REYNDERS & Co., Makers of Surgical and Veterinary Instruments, in this city, have recently devised an apparatus which is calculated to obviate all difficulty in administering fluid medicine to horses and cattle. It consists of two compartments A and B; B communicating with the metal tube B, and A with the soft rubber hose A. The vessel B is to hold the medicated fluid, and A contains lukewarm water which may be filled in through C. The soft rubber hose A is introduced into one of the nostrils and the metal tube B into the mouth; then tilt the horn upwards, when the water will enter the nostril, forcing the animal to swallow the medicine without difficulty.

A Hypodermic Syringe which is Always Ready.

PROF. J. T. WHITTAKER describes in the *Lancet and Clinic* a new modification of the hypodermic syringe made at his suggestion by Mr. Wm. Autenrieth, of Cincinnati, which is illustrated in the adjoining figure. The essential feature of the instrument is a screw-cap, like the one used to connect the needles with the syringe, but which is closed, so as to retain in the syringe or drop or two of fluid. This serves to prevent the leather packing of the piston from becoming dry and losing its power of suction, and likewise it avoids the other fault of a loose piston, viz.: the passage of the fluid above the piston when the latter is pushed down, thus preventing any accurate knowledge of the amount injected.

Mocking Bird Food.—Apothecaries are often called upon for a food suitable for mocking-birds, thrushes, robins, sky-larks, blackbirds, starlings, and other soft-billed birds. The following formula has been sent to us by Mr. F. X. Hart, of 57th St. and Second Ave., in this city, who has for some time past manufactured this food for the trade.

Hemp-seed	3 parts.
Zwieback (toasted wheat bread)	2 "
Maw-seed	1 part.
Ox-heart	1 "

Boil the ox-heart well in water, then cut it small, and place it on a pan in an oven where it must be allowed to become perfectly dry and crisp. All the ingredients must then be thoroughly mixed and ground in a mill to coarse powder.

NEW PATENTS.

[*The following list is compiled from official sources, especially for* NEW REMEDIES, *by S. H. Wales & Son, Solicitors of Patents,* 10 *Spruce St., New York, who will furnish gratis to subscribers any information relating to this department.*]

LABELS REGISTERED DURING AUGUST, 1878.

Labels.

1,643. "Volney's Cardamom Compound." Charles H. Davis, Haverhill, Mass.

1,644. "Health Food Company's Gluten Soap." Frank Fuller, New York, N. Y.

1,645. "Lydia E. Pinkham's Liver Pills." William H. Pinkham, Lynn, Mass.

1,647. Prof. A. J. Rainey's Hog-Cholera Compound, Andrew J. Rainey, Nebraska City, Neb.

1,649. "The Druggist Brand of Pure Refined Oil of Peppermint." Menzo H. Dillenbeck, Lyons, N. Y.

1,650. "Howard's Great South American Remedy." Austin Howard, Milford, Mass.

1,654. "Woodward Vegetable Liver Renovator." George Y. Woodward, Louisville, Miss.

1,655. "Saccharated Chloro-Pepsine." Benjamin W. Dyer, New York, N. Y.

1,656. "Buff's Cough Cure. Darby & Williams, New York, N. Y.

1,657. "Dextro-Quinine." Henry G. Keasbey, Philadelphia, Pa.

1,659. "Spanish Cholera Remedy." Roger S. Spaulding, Woburn, Mass.

1,660. "Guardias' Ointment." Soler & Guardias, New York, N. Y.

1,663. "Pepto-Quinine." Nathaniel R. Bradner, Philadelphia, Pa.

1,664. "Prentiss' Extract of Jamaica Ginger." Tibbals, Abbott & Co., Philadelphia, Pa.

1,668. "Hop Tonic." Charles R. Stuart, Cleveland, Ohio.

1,669. "Madam Le Beautiller's Elixir of Youth Lotion." Lizzie Strong, Louisville, Ky.

TRADE MARKS REGISTERED DURING SEPTEMBER, 1878.

Medicinal Preparations.

6,531. Victor E. Mauger, New York, N. Y. The arbitrarily selected word "Chinkalyptus."

6,534. Henry A. Tilden, New Lebanon, N. Y. The fanciful or arbitrarily selected word "Convexules."

6,555. Alvin W. Beach and Ellen C. Beach, Syracuse, N. Y. "The word-symbol 'German Drops' and the figure of hope, substantially as shown."

6,560. Household Medicine Co., Florence, N. J. "The word-symbol 'Asparagin' and the representation of a bunch of asparagus, as shown."

6,575. William E. Clarke, Providence, R. I. "The design shown, said design representing a double-ended banner on which the word's 'Hunt's Remedy' are displayed, a 'glory,' or representation of rays of light, being arranged above the banner, as shown."

6,579. Alexander E. Mintie, San Francisco, Cal. "The arbitrarily selected word, 'Nephreticum."

6,580. William Coudell, St. Louis, Mo. "The word-symbol 'Herbine.'"

658,7. Alexander E. Mintie, San Francisco, Cal. "The arbitrarily selected words or title, 'The Sir Astley Cooper.'"

6,589. Henry C. Stewart, Jacksonville, Ill. "The two monograms composed of the letters 'H. C. S.' as shown."

6,612. Julien Verliac, Paris, France. "The representation of a circle formed by two serpents, said circle containing a plant, and the word-symbol 'Ugeia' in Greek letters, and the fac-simile signature, 'Laville ☐ M. P.'"

Soap, Perfumery, etc.

6,525. William J. Austen, Oswego, N. Y. "The word-symbol 'Forest Flower.'"

6,537. William Greene, New York, N. Y. "The figure or device of a black diamond, with a monogram formed from the letters 'W. G.,' as shown.

6,549. David S. Brown, New York, N. Y. "The fanciful words 'Silver Prize.'"

6,550. D. S. Brown & Co., New York, N. Y. "The fanciful words 'Golden Lotus.'"

6,563. Johann Maria Farina, Cologne, Germany. "The fac-simile autograph signature 'Johann Maria Farina, Julichs Platz, No. 4,' when used in connection with the coat-of-arms of the city of Cologne."

6,564. Johann Maria Farina, Cologne, Germany. "A circle, within which is represented a small vase, surmounted by a diamond and two crescents, with their convex surfaces in contact with the two side angles of the diamond. The letter 'J' is placed above the diamond, and the letters 'M' and 'F' occupy each one of the spaces formed at the sides of the crescent. Around the circle is a larger circle, having an extension at one side, with a black line through the centre of the straight portion, all as shown."

6,604. Solon Palmer, Newark, N. J. "The arbitrarily selected word 'India.'"

6,611. Charles Lubrecht, Brooklyn, N. Y. "The arbitrary word 'Circassian.'"

Chemicals, Paints.

6,559. A. M. Fletcher and James McCoy, San Francisco, Cal. "The word-symbol 'Imperishable.'"

6,571. Western White Lead Co., of Philadelphia, Pa., and Chicago, Ill. "The representation of a silvered disc, in connection with the words, 'Silver Coin,' essentially as shown."

6,590. Augustus O. Brummel, Washington, D. C. "The word-symbol 'Virginia.'"

Mineral Waters.

6,566. The Apollinaris Company (limited), London, Eng. "A pictorial representation of a spring or fountain surrounded by plants, as shown."

Miscellaneous.

6,539. Redding & Co., Boston, Mass. "The arbitrarily selected word 'Russia,' the autograph signature 'Redding & Co.,' and the pictorial illustration, substantially as shown."

6,578. J. W. Cole & Co., Black River Falls, Wis. "The arbitrarily selected word 'Take Out.'"

6,585. William E. Jervey, New York, N. Y. "The arbitrarily selected words 'Flowers of Petroleum.'"

6,592. Ansar, Harford & Co., London, Eng. "The figure of a cod-fish upon a representation of a shield, and the fac-simile autograph signatures of A. H. & Co., and Dr. de Jongh."

6,593. Ansar, Harford & Co., London, Eng. "A relief figure representing the head of His Majesty William II., King of the Netherlands, and a wreath or circle of leaves and flowers, as shown."

LABELS.

1,672. "Austen's Forest Flower Cologne." William J. Austen, Oswego, New York.

1,673. "Fragrant Carminative Sweet Aroma for the Breath." Fleming & Co., New York, N. Y.

1,674. "Anti-Lean, the Greatest Medical Discovery of the Age." James D. Judge, Boston, Mass.

1,676. "Chinkalyptus," Victor E. Mauger, New York, N. Y.

1,680. "Godsay's East India Fever Tree Extract." Charles D. Chase, St. Louis, Mo.
1,681. "Coca Beef Tonic with Sherry Wine and Iron." Madeline Hoffman, New York, N. Y.
1,682. "Cocoa Beef Tonic." Madeline Hoffman, New York, N. Y.
1,687. "Carbolated Iron." Wm. R. Warner & Co., Philadelphia, Pa.
1,688. "Mushroom Powder." J. B. Anthony & Co., Troy, N. Y.
1,689. "Death to Corns, Bunions, and Chilblains." John Bath, Boston, Mass.
1,692. "Flowers of Petroleum." William E. Jervey, New York, N. Y.
1,693. Carbolized Cosmoline." E. F. Houghton & Co., Philadelphia, Pa.
1,695. "Flowers of Petroleum." William E. Jervey, New York, N. Y.
1,696. "Mrs. Kendall's Ointment." Elizabeth Kendall, Dunstable, Mass.
1,697. "Persian Kababa." Gilbert L. Stevens, Meadville, Pa.
1,698. "Pure Sublimed White Lead." Samuel P. Wetherill, Philadelphia, Pa.

PATENTS GRANTED DURING SEPT., 1878.

September 3d.

Chair, dental, W. S. How.....207,741
Dental engines, motor for, A. H. Best.....207,707
Dental plate, B. M. Wilkerson.....207,699
Eye-shade, J. B. Ricketts.....207,624
Pigment, W. Prescott.....207,773
Scale-beam, H. L. Grisell.....207,735
Scales, platform weighing, J. F. Milligan.....207,762

September 10th.

Carburetter, T. Miner.....207,886
Carburetting apparatus, L. H. Reid.....207,983
Chair, dental, H. C. Tripp.....208,000
Dental drill, W. M. Reynolds (R).....8,409
Medical compound, W. M. Green.....207,864
Surgical dilator, W. I. Alvord.....207,923
Ultramarine, manufacture of violet, J. Zeltner.....207,836

September 17th.

Bottle-stopper, H. Bell.....208,146
Bottle-stopper, F. J. Seybold.....208,043
Medicament for catarrh, J. W. Blosser.....208,064
Syringe, E. N. Bliss and J. Davol.....208,062
Tooth-powder box, H. Bell.....208,145
Truss, abdominal, J. V. Epple.....208,079

September 24th.

Bottle-stopper, F. Koeller.....208,403
Injector, W. Sellers and J. S. Bancroft.....208,425
Injector, M. D. Strickland.....208,437
Scales, drop-lever weighing, F. Fairbanks.....208,800
Scales, weighing, F. H. Ward.....208,444
Suspensory-bandage, C. F. Hill.....208,240
Syringe, or liquid-dropper, W. W. Stewart.....208,273

To Cut and Bore India-Rubber Corks.—A writer in the London *Chemical News* says: "Dip the knife or cork-borer in solution of caustic potash or soda. The strength is of very little consequence, but it should not be weaker than the ordinary reagent solution. Alcohol is generally recommended, and it works well until it evaporates, which is generally long before the cork is cut or bored through, and more has to be applied; water acts just as well as alcohol and lasts longer. When, however, a tolerably sharp knife is moistened with soda-lye, it goes through india-rubber quite as easily as through common cork; and the same may be said of a cork-borer of whatever size. I have frequently bored inch holes in large caoutchouc stoppers, perfectly smooth and cylindrical, by this method. In order to finish the hole without the usual contraction of its diameter, the stopper should be held firmly again a flat surface of common cork till the borer passes into the latter."

PRESCRIPTIONS AND FORMULÆ.

Artificial Mineral Waters.

(Continued from page 348.)

12. *Homburg. Elizabethquelle.*

		To make 10 litres.
Sodium sulphate	sol.....	4.96 grammes.
" chloride	"	820.6 "
" carbonate	"	183.2 "
" silicate	"	8.26 "
Magnesium chloride	"	129.78 "
Calcium chloride	"	259.86 "
Iron (proto-) chloride (ferrous)		0.846 "
Distilled water.....		8,592.5 "
Carbonic acid.....		4 volumes.

13. *Karlsbad.* The various Karlsbad waters (Aquæ Carolinenses) differ from each other but little, except in the amount of carbonic acid, and in temperature. The difference as to the latter is:

Theresienbrunnen.....	50° C.
Schlossbrunnen.....	50° C.
Mühlbrunnen.....	52.5° C.
Neubrunnen.....	53° C.
Sprudel.....	73° C.

The following formula yields a water of *double* the strength of the natural. For use it should be diluted with an equal volume of fresh or carbonic acid water:

		To make 10 litres.
Sodium carbonate	sol.....	349.14 grammes.
" sulphate	"	501.14 "
" chloride	"	84.44 "
" phosphate	"	0.10 "
" silicate	"	30.12 "
Potassium sulphate,	dry....	1.87 "
Sodium fluoride	"	0.07 "
" bromide	"	0.024 "
" iodide	"	0.0003 "
Calcium chloride	sol.....	69.26 "
Magnesium chloride	"	40.34 "
Strontium chloride	"	0.20 "
Aluminium chloride	"	0.06 "
Manganese sulphate, dry	...	0.02 "
Iron (proto-) sulph., gran.	...	0.17 "
Lithium carbonate.....		0.05 "
Distilled water.....		8,923 "
Carbonic acid.....		3-3.5 volumes.

14. *Kreuznach. Elizabethquelle.*

		To make 480 troy ounces.
Potassium chloride	sol.....	187 grains.
Lithium chloride	"	184 "
Sodium silicate	"	79 "
" carbonate	"	511.5 "
" chloride	"	21,170 "
" bromide	" ...	93 "
" iodide, dry.....		1.12 "
Magnesium chloride	sol.....	1,304 "
Calcium chloride	" ...	4,579 "
Distilled water.....		202,292 "
Carbonic acid.....		3.5 volumes.

15. *Püllna. Bitterwasser.*

		To make 10 litres.
Sodium sulphate	sol.....	1,458.24 grammes.
" carbonate	"	117.18 "
Potassium sulphate,	dry....	6.25 "
Magnesium sulphate	sol.....	1,373.60 "
" chloride	"	183.58 "
Calcium chloride	"	39.06 "
Distilled water.....		6,822.10 "
Carbonic acid.....		2.5 volumes.

(To be continued.)

ITEMS.

College of Pharmacy of the City of New York.—A conversational meeting of the members of the College was held at the College building, on the evening of Thursday, Nov. 21st. The main subject announced for discussion was "Quinine," and Mr. Daniel C. Robbins read a paper on this subject, which was followed by remarks by various members present. An abstract of this paper will be found in the January number of NEW REMEDIES.

A meeting is to be held on the evening of the 10th of December, which will be somewhat of the nature of a "house-warming." On this occasion the lecture room and halls will be decorated, and the whole building thrown open for inspection by friends and patrons of pharmacy. The exercises will consist of music and addresses by the President and members of the faculty.

Students at the Pharmaceutical Schools.—The following statement of the number of students in attendance at the various colleges of pharmacy in this country is compiled from recent reports to this journal.

Ann Arbor	60
Chicago	60
Cincinnati	90
Louisville	35
Maryland	60
Massachusetts	60
National	26
New York	240
Philadelphia	340
Pittsburgh	45
St. Louis	80
Tennessee	12
	1,108

Annual Report of the Western Druggists' Mutual Benefit Association.—At the annual meeting of the Western Druggists' Mutual Benefit Association, of Cincinnati, held on the 16th of November, the Secretary and Treasurer submitted the following statement of their business, which embraced a period of only ten months:

The total receipts for the year ending November 6th are $1,605.90; the disbursements for the year ending November 6th are $905.20; leaving a balance on hand of $700.70.

We have no deaths to report to this date.

The Secretary calls the attention of the Trustees and the Association to the fact that the expense of the Association has been much greater than it will be in the future, as they have sufficient materials on hand to last some years, with a small additional expense.

The following-named gentlemen were elected members of the Board of Trustees for the term of two years: Professor E. S. Wayne, S. M. McKenzie, Dr. R. M. Byrnes, Dr. F. L. Eaton, Ambro R. Park, and Charles Faust.

The members who hold over for the unexpired term of one year are W. J. M. Gordon, Otto Rauchfuss, J. M. Dodge, Chas. C. Reakirt, H. M. Merrell, and Andrew W. Bain, elected in place of E. S. Emerson, resigned.

The meeting of the Board was immediately convened upon the adjournment of the Association, and elected W. J. M. Gordon President; Otto Rauchfuss, Vice-President; J. M. Dodge, Secretary, and Chas. Faust, Treasurer, for the ensuing year.

In the city of New York, a Local Board has been organized, comprising such old and well-established houses as McKesson & Robbins, represented by William L. Vennard and T. H. Sherwood; Lazell, Marsh & Gardiner, represented by Professor P. W. Bedford; Hall & Ruckel, represented by Wm. H. Hall; Caswell, Hazard & Co., represented by R. N. Hazard; S. H. Ambler & Co., represented by Starr H. Ambler, 36 Vesey street; Theo. Ricksecker, 146 and 148 William street; A. J. Ditman, corner Barkley and Broadway; Dr. L. V. Newton, of the *Druggist Circular*; Dr. F. A. Castle, of NEW REMEDIES, corner of Fifty-seventh street and Fourth avenue, with Henry A. Cassebeer, jr., corner Ninth street and Fourth avenue, as Local Secretary.

In Philadelphia, the local organization will be represented by Professor John M. Maisch, Joseph P. Remington, corner Thirteenth and Walnut streets; Messrs. Edmund A. Crenshaw, William F. McPherson, of Johnston, Holloway & Co., Joseph Wayne, of Turner & Wayne, Richard V. Mattison, of Keasbey & Mattison, and Henry N. Rittenhouse, of Mellor & Rittenhouse, who is selected as the Local Secretary for this city.

Thomas H. Powers.—A large and well attended meeting of the drug and chemical trades was held on Friday, Nov. 22d, at the Orient Building, 43 Wall Street, New York, to take some action on the death of Mr. Thomas H. Powers, of the firm of Powers & Weightman, Philadelphia. The meeting was called to order by Mr. Carl H. Recknagle, who announced the object of the meeting, and stated that it had been thought that some action was due from the trade of New York, in view of the intimate relations that had existed with the firm of the deceased gentleman. On motion of Mr. Eugene Dutilh, a committee of five was appointed to prepare suitable resolutions. The Chair appointed Messrs. Eugene Dutilh, of Dutilh & Co.; Chas. T. White, of C. T. White & Co.; W. A. Gellatley, of W. H. Schieffelin & Co.; R. H. Hoadley, of Hoadley & Co.; and James H. Taft, of Taft, Lee & Co. The committee submitted the following resolutions, which were adopted. The meeting then adjourned.

Resolved, That his urbanity of manner, courteous regard for others, and his equitable bearing under all circumstances, will cause the name of Mr. Powers to be held in grateful remembrance by those with whom he had business intercourse.

Resolved, That while it would accord with his unobtrusive disposition to avoid reference either to his special philanthropies or to his more constant Christian charities, we deem it proper to make suitable recognition of the fact that amid his engrossing business responsibilities, he found time to attend with fidelity to interests which were thus acknowledged as of the highest importance.

Resolved, That this meeting, in transmitting to the family of Thomas H. Powers a copy of these resolutions, offered in token of their appreciation of the worth of our departed friend, tender our respectful condolence and heartfelt sympathy.

The Cobalt Hygrometer.—Unsized paper, as thin blotting or filtering paper, is to be dipped into a solution of chloride of cobalt, common salt, and a little gum arabic. It is red at first, but while drying becomes more pink, bluish-red, and finally blue when quite dry. As the paper thus prepared is slightly hygroscopic, it will easily attract atmospheric moisture, and be colored more or less reddish in proportion as it finds more moisture to attract. The *Manufacturer and Builder* suggests that if it is to be used in very dry climates, as in some of our Western regions, a very little glycerin or chloride of lime may perhaps be added to the solution, when it will be more capable of indicating the differences in moisture in comparatively dryer kinds of air. A good addition to this arrangement is a disc painted with half a dozen or more shades of red and blue for comparison, as enumerated below, which shades may then be marked thus:

Rose-red,	Pink,	Bluish-pink,	Lavender,	Violet,	Blue,
Rain.	Very moist.	Moist.	Middling.	Dry.	Very dry.

Ice direct from the Glacier.—The Olympia (Wyoming Territory) *Standard* announces that a company has been formed there to bring ice from a glacier. The deposit covers a number of acres, is seventy or eighty feet deep, and is supposed to contain a hundred thousand or more tons, some of which may have been there as many years. The ice can be cut and sold at 1½ cents per pound, and by the ship load at five dollars per ton.

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